Clinical Lectures
ON
CASES OF DIFFICULT DIAGNOSIS.

By SAMUEL FENWICK, M.D., F.R.C.P.,
PHYSICIAN TO THE LONDON HOSPITAL.

LECTURE VI.

ON FÆCAL ABSCESSES CONNECTED WITH THE SMALL INTESTINES.

GENTLEMEN,—In a former lecture we discussed the subject of fæcal abscesses arising from ulceration of the colon, and we found it was necessary to consider them separately from those connected with the small intestines, on account of the great difference in the structure, functions, and anatomical relations of these sections of the digestive tube. I now wish to direct your attention to abscesses connected with the other portions of the intestinal canal, but it will be necessary to examine those of the duodenum separately, as this part differs in many important particulars from the rest of the small intestines.

When it is considered how often we meet with perforation of the ileum in post-mortem examinations, we should expect frequently to find an abscess connected with this part; but such is by no means the case. It not unfrequently happens, indeed, that in tubercular peritonitis two or more loops of intestine are united by adhesions, which wall in a collection of pus communicating with the interior of the gut; but as in such instances there is rarely any external tumour, and there are no symptoms differing from those of an ordinary case of tubercular peritonitis, we shall at present reject these and direct our attention only to those cases in which there are symptoms or physical signs that would enable us to suspect the existence of an abscess. On examining the post-mortem records of this hospital, I have met with five such cases of fæcal abscess connected with the small intestines, and I have been able to collect from various authors twenty-five others in which the presence of an abdominal tumour produced by this affection had been remarked during life, and in which a detailed account is given of the appearances discovered after death. It is not, however, difficult to explain the rarity of fæcal abscess connected with the small intestines, for their mobility, the rapidity with which ulceration proceeds in them, and the liquid nature of their contents are sufficient to point out why a general rather than a local inflammation should usually follow perforation of their coats.

When we analyse the cases I have collected, we find that the numbers resulting from the various conditions capable of producing fæcal abscesses are very different from those we before met with when we examined the same affection as connected with the large intestine. Thus three commenced in inflammation around the pelvic organs, which had ended in suppuration, bursting into the lower part of the small intestines, and in all of them there was general peritonitis, in addition to the adhesions surrounding the abscess. In one, which occurred in this hospital, the small intestines had been perforated by an abscess which seemed to have originated in an ulceration of the colon produced by dysentery. In another in our records there was a tumour the size of a child's head connected with the lower part of the ileum; the walls were one inch thick and composed of a cancerous growth, the coats of the intestine being completely destroyed and the two ends of the healthy portions of the gut being continuous with the fæcal cavity thus formed. In a third in our records a very rare condition was discovered: the coils of the jejunum were united by adhesions; their contents had escaped from an opening between them; but the cause of the perforation was found to be the distension produced by a narrowing of the ileum resulting from a small tumour that projected into the cavity of the intestine.

In eight out of twenty-five cases the fæcal abscess had followed an injury to the abdomen. There can be little doubt that this proportion is in excess of what it would be if every case of fæcal abscess had been recorded, but cases produced by accident are especially apt to be noted, as the symptoms are from the first usually well marked, and immediately follow the injury. As this part of our subject is of great practical importance, and has scarcely received the amount of attention it deserves, it will be advisable for us to consider for a few minutes the various ways in which an injury is capable of producing ulceration of the small intestine.

In the first place, then, a blow on the abdomen often sets up either general or local peritonitis, which may terminate by adhesions of some of the loops of the intestine to each other and to the abdominal parietes, these loops being apt to be bent at angles more or less acute. It is at these sharp bends that ulceration often commences, and if it should proceed slowly a fæcal abscess may result. General adhesions were mentioned in six out of eight cases in which the abscess had resulted from injuries; and in five out of the twenty-five cases of fæcal abscess it is recorded that the perforation took place at an angle of a portion of gut fixed by adhesion; this occurred not only when inflammation had followed the receipt of injuries, but also in tubercular peritonitis, and in two instances where there had been only a local non-tubercular inflammation of the peritoneum. It is not difficult to explain why a portion of gut sharply bent by adhesions should be more liable to ulceration than when it is in its normal condition, for the flexure must tend to congest its bloodvessels as well as impede the transmission of its contents.

Secondly, a slight blow may set up suppuration in the abdominal walls or in the connective tissue behind the peritoneum, which may open into any part of the canal. A case is mentioned in our records in 1839 where a boy in delicate health received a blow on the abdomen from a schoolfellow, which occasioned inflammation that terminated his life in five days. On post-mortem examination, three abscesses were found behind the peritoneum, which had been the cause of his death. No opening, however, had taken place into the intestine, although we can imagine how easily such an occurrence might have taken place if the patient's life had been prolonged.

Thirdly, in three of the cases a very small opening in the intestine was discovered after death, and it was believed by those who recorded them that the perforations were the result of previous injury. It seems difficult to understand how an opening the size of a shilling, as is mentioned in one instance, could fail to allow of an immediate escape of the intestinal contents, and thus give rise to rapidly fatal peritonitis, unless we assume that the canal was quite empty at the time of the accident. As this would be rarely the case, I think it is more probable that only one of the coats was in the first instance ruptured, and that the perforation of the canal took place at a subsequent period by an extension of the ulcerative process.

Of the twenty-five collected cases, only seven are noted as resulting from a tubercular affection of the peritoneum. Such a proportion is, however, much below what it would have been if all that came under observation had been recorded, for the occurrence of an abscess of this kind in phthisical cases may take place without producing any very marked variation in the symptoms or deterioration in the condition of the patient, and is consequently apt to be looked upon only as an accident of the general disease. Fæcal abscess connected with this portion of the intestinal canal is, however, so generally the result of this cause, that whenever we are able to exclude the effects of accidents and previous peritonitis, we shall be justified in assuming any case that may present itself as probably due to tuberculosis. Tubercular peritonitis, as you are often told, and as you see so frequently exemplified in the wards, presents itself clinically under three forms: in one the onset of the complaint is sudden, its course rapid, and often closely simulates typhoid fever; in the second there are at first the same acute symptoms, but these soon subside, and an affection of the lungs or some other organ becomes the more prominent manifestation of the disease; whilst in the third the symptoms are from the first subacute, and the malady runs a more chronic course. Now it is in this latter form that, according to my experience, fæcal abscess is most apt to take place, for the intestines become generally adherent, and any escape from the canal is liable to be walled in by the neighbouring viscera; and in support of this opinion it may be remarked that in six out of seven of the cases it is stated that there were general adhesions of all parts of the peritoneal cavity. The ulceration may commence either

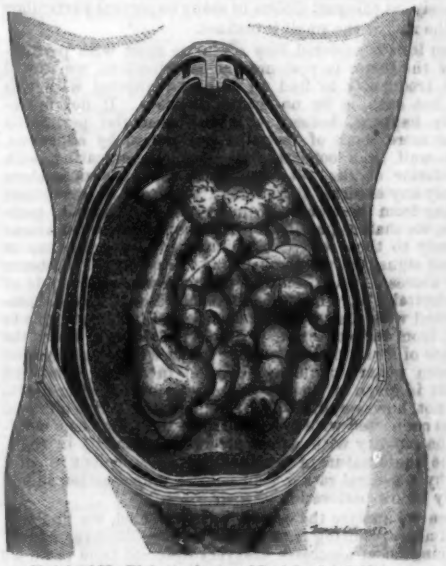
on the mucous membrane or externally. In two of the seven cases ulcerations of the mucous membrane are noted as having been unusually extensive, and in three there were also ulcerations of the colon. Perforation, as has been before mentioned, was found to be most apt to occur at any sharp bend of an adherent loop of the intestine; on the other hand, three are described as having commenced as "encysted peritonitis," the pus having subsequently made its way into the canal. In all cases the walls of the abscess were formed by the adherent viscera or by thickened membranes. In one instance discharge of feculent matter took place at the umbilicus, in another through the obturator foramen; but generally the abscess was only discovered after death.

The earliest symptoms of the cases of fæcal abscess that I have collected varied according to the disease that gave rise to the ulceration of the intestine. For example, a boy was treated in this hospital for typhoid fever, which ran its usual course, and on his recovery he was sent into the country for change of air. Five weeks afterwards he was suddenly attacked with pain in the abdomen, loss of appetite, and constant vomiting, and was readmitted into the hospital, where he died. On post-mortem examination, numerous ulcerations were found in both the small and large intestines, there were also extensive adhesions between the coils, and an abscess containing fæcal matter communicated with one of the adherent loops of the gut. When the abscess resulted from an accident, the first symptoms were pain of the abdomen and vomiting, and in some instances collapse. In tubercular cases pain of the abdomen and vomiting were also the earliest indications of the disease; in one these were attended with rigors.

As in every instance there was general or local peritonitis, the symptoms during the progress of the malady were only indicative of that condition; indeed, a fæcal abscess was rarely suspected during the life of the patient. Vomiting, pain of the abdomen, and tenderness on pressure constituted the most prominent subjects of complaint. In two instances blood was remarked in the stools, and diarrhœa is recorded as having been present in one quarter of the cases. In seven a more or less defined swelling was observed during life; in one a circumscribed tumour is mentioned as being present near the umbilicus, and in another a tumour was noted at the hypogastrium; all of these being cases of tubercular peritonitis. In a case where the ulceration arose from a sharp bend in a loop of intestines produced by adhesions, an abscess presented itself in the thigh and was opened; in another, arising from a similar cause, the pus was discharged at the groin.

I now propose, gentlemen, that we should direct our attention to abscesses connected with the duodenum, and I must first remind you of the differences in the position and relations of this part, as compared with those of the other sections of the small intestine. Instead of having a complete investment of peritoneum, its second and third divisions are only covered by this membrane in front, and are therefore in immediate relation with the connective tissue behind; and, as a result of this arrangement, perforating ulcers may produce abscesses that may burrow in different directions, and may present themselves at a considerable distance from their point of origin. Then again, the duodenum is fixed and surrounded by numerous important organs, such as the liver, gall-bladder, kidney and colon, all of which are liable to acute inflammations, the product of which may discharge itself into this portion of the intestinal canal. I cannot better show the difference between an abscess of this part and those we have been lately considering than by reading to you the notes of a case for which I am indebted to the kindness of my friend and colleague, Mr. Rivington.

CASE 1.—William C——, aged nineteen, plasterer, was admitted under the care of Mr. Rivington on Nov. 1st, 1881. In the afternoon he had fallen upon his abdomen from a height of 12 ft.; he was picked up by his fellow-workmen and carried home. He vomited everything he took, and was brought to the hospital the same evening. Very little history of his previous state of health could be obtained, but it was stated by his friends that he had been drinking heavily for some time, and that the vomiting had commenced two days before the accident. He had, on admission, a pinched and anxious face, pulse very feeble, skin hot and bathed with perspiration, and he complained of slight pain in the hypogastric region; temperature 100·4°. He made no complaint of any severe pain. On Nov. 3rd the pain was localised to the right inguinal region; bowels confined. On the 7th he was very restless, and had fixed pain in the right inguinal region; diarrhœa for two days. On the 15th he seemed to be in a typhoid condition; fulness was noticed in the right inguinal region, and there was some dulness there on percussion. On the 18th there was a distinct fulness close to the pubes in the right inguinal region, which was hot and tender; the stools were formed, but offensive. He gradually improved after this date, and left the hospital on Dec. 24th. His temperature varied between 100° and 103° until Nov. 21st, after which it rose every evening to 102°, falling in the morning to the normal point. He was readmitted on Feb. 1st, 1882. He was then somewhat emaciated, his cheeks thin and flushed, and his expression anxious. There was a hard swelling in the right groin above and to the right of Poupart's ligament, which fluctuated with an emphysematous crackling, as if air and fluid were intermixed; bowels opened daily. He had little pain or tenderness over the abdomen. On the 10th an incision was made into the tumour, and a large quantity of yellowish feculent pus was evacuated. On the 27th the discharge was feculent and profuse, and pressure on any part of the abdomen caused a large quantity to be evacuated. On June 14th the sinus was more freely opened, and a large amount of fæcal matter removed. On the 28th diarrhœa came on, and he became much weaker. He lingered until July 31st, when he sank from exhaustion, nine months after the receipt



Sketch of Mr. Rivington's case of Peri-duodenal Abscess.

of the accident. The temperature always rose in the evening to 101° or 102°, and generally fell to the normal point in the morning.

Post-mortem Examination.—The body was so much wasted that it looked as if the patient had died of starvation. On opening the abdomen, a channel was discovered extending from the under surface of the liver to Poupart's ligament on the right side; it was situated behind the ascending colon, and was about two and a half inches wide. The roof and inner wall were formed of thickened peritoneum and the adhering gut, the floor by the thickened fascia covering the quadratus lumborum and the ileo-psoas, the outer wall by the thickened transversalis fascia, and there was a free opening at Poupart's ligament where was a fæcal-stained cavity, supposed, at first sight, to be formed of the gut adhering to the abdominal wall. The lower horizontal limb of the channel ran behind the pubes and formed a slightly sacculated end in the left groin. The channel contained no solid fæces, but its walls were coated with a brownish-yellow fæcal deposit. As it was supposed there might be some connexion with the intestines, water was injected into the colon and into the small intestines, but none escaped until it reached the duodenum, from which part it flowed out in a large stream into the upper extremity of the channel and swept downwards to Poupart's ligament. At the point of

escape the duodenum presented an ulceration the size of a sixpence, with thickened edges, about five inches and a half from the pylorus, which had perforated all the coats and communicated with the channel. All the other organs of the body were healthy. (See Figure.)

In this very interesting case it is impossible to determine, from the want of a proper history of the condition of the patient before the injury, if there had been previously an ulcer of the duodenum; but whether such was the case or not, it is evident that the intestine was ruptured by the fall. The accident occurred at three in the afternoon, two or three hours after the usual dinner-hour of the labouring class, when the duodenum would be probably distended by the products of the gastric digestion, and therefore most liable to suffer from a severe blow. The vomiting and partial collapse in which he was found on his admission into the hospital pointed to some grave injury of the abdominal organs, whilst the complaint of pain in the right groin at that time seems to prove that the intestinal contents had already found their way into and down the connective tissue behind the peritoneum. This conclusion is supported by a very similar case described by Mr. George Pollock.

CASE 2.—"A young man was admitted into St. George's Hospital with symptoms of ruptured intestine, but somewhat less prominently marked than is usually observed when such an injury has occurred, so much so that we hesitated to give a positive opinion as to the exact amount or situation of the mischief. Under treatment for a few days he seemed to improve. Then worse symptoms set in, and he died twelve days after the accident. The duodenum was found lacerated behind the peritoneum. Its contents had escaped and had set up suppuration, which had travelled down in front of the right kidney behind the peritoneum, as low as the right iliac fossa."[1]

These cases are most valuable, not only in proving that injuries of the small intestines may, under certain circumstances, perhaps end in recovery, but also in showing that the part to which the pain is referred may be at a great distance from the actual site of the lesion. In both suppuration was established in the connective tissue behind the peritoneum; and in Mr. Rivington's case an abscess presented itself in the neighbourhood of the bladder, and was opened in the groin.

I have, gentlemen, in previous lectures, prefaced the consideration of each subject with one or two cases which might serve as illustrations of the usual course of the disease we were discussing, but on the present occasion I have departed from this plan. The two examples I have just quoted are intended to show the differences that may exist between abscess connected with the duodenum and those of other parts of the small intestine, but cases of this sort are so extremely rare that you are not likely yourselves to encounter them. In the course of my reading I have not met with any others precisely similar as regards the length of time the patient lived after the accident, or where the symptoms of suppuration of the connective tissue so rapidly followed the injury.

When examining the abscesses that are connected with the other portions of the small intestines, we found they were most frequently due to tubercular disease, but this does not seem to be the case with respect to those of the duodenum. In our post-mortem records I have only been able to discover five instances of peri-duodenal abscess; in three the mischief had been caused by the perforation of duodenal ulcers, in one by suppuration set up by an impacted gall-stone, and in one by tubercular disease of the kidney, which had produced a perinephritic abscess that burst into the duodenum. I have collected twenty-nine cases (including the above) from various authors, and of these eighteen originated in ulcers of the duodenum, three in chronic ulcers of the stomach, five in suppuration in the neighbourhood of the gall-bladder, and one in what was believed to have been an old hydatid cyst of the liver.

Let us, in the first place, examine the cases that have arisen from ulceration in the duodenum itself. You are aware that the stomach differs from the other parts of the digestive tube in its greater liability to the "round," or, as it is often termed, the "perforating" ulcer; and the mucous membrane of the duodenum also presents instances of the same kind of lesion. It is, however, much more rare, for only five post-mortem examinations of duodenal ulcer are recorded in our books during a period in which there are noted sixty-nine fatal cases of gastric ulcer. The usual site in the cases I have collected of the ulcers producing abscess was in the superior portion of the duodenum, where it is covered, like the stomach, by peritoneum; for of ten, eight are stated to have been situated in this locality, one was in the descending and one in the transverse portion; in the remainder the site is not stated. This greater liability of the superior portion you must not refer to a greater tendency there to the production of abscess, for it is the part that is most subject to ulcerations; thus, Kraus states that of sixteen cases of perforating duodenal ulcer he had collected, twelve were situated in this part of the gut. It would appear that acute ulcers are but little apt to set up abscess, as they generally destroy life either by hæmorrhage or by perforation into the cavity of the peritoneum, for in only one instance of those I have collected are the edges stated to have been sharp; in all the others they are described as "round" or "thickened." The materials forming the walls of the abscess varied greatly; thus, in ten out of eighteen they were formed by the adhesion of some of the neighbouring viscera, in two the pus was contained in a cavity in the substance of the pancreas, and in five suppuration had taken place in the connective tissue behind the intestine, and had spread from that part in different directions. In most instances it is worthy of notice that the abscess might have been safely reached by a surgical operation.

It is a common remark that no important part of the animal frame can become the seat of disease without other organs being also affected, and abscesses arising from ulcerations of the duodenum present no exception to this rule. In one out of eighteen the duodenum is said to have been dilated, in two its calibre was contracted, in five the stomach was found to be greatly dilated, and in two the spleen was much enlarged. The dilatation of the stomach is, I suspect, a much more frequent accompaniment of chronic duodenal ulcer than might be supposed from these figures, and may be a useful sign in the diagnosis of such cases. In only two a tubercular condition of the lungs is mentioned. In five instances the abscess originated in the neighbourhood of the gall-bladder, and afterwards burst into the duodenum. In each case it seems to have been the result of irritation set up by gall-stones, but in one concretions could not be discovered, although the ducts were greatly dilated, pointing to the previous existence of some obstruction to the free exit of the bile. The exact place at which the pus had been discharged into the intestine is only mentioned in two cases; in one it was into the superior and in the other into the descending portion. In all the sac was formed by adhesions, and no case is recorded in which suppuration was set up in the connective tissue. This is of course what might have been expected, as the abscess in most cases originates in suppuration of the gall-bladder itself. In two instances the abscess was situated at a little distance from the duodenum, and opened into it by means of a sinus. In one the abscess was produced by the irritation of a malignant tumour that involved the gall-bladder and ducts, but no mention is made of the presence of a calculus.

The cases I have collected throw but little light upon the causation of duodenal abscess. Of course when they originated from gall-stones, hydatid cysts, or perinephritic abscesses, it is easy to account for them, but what we are chiefly concerned with is to ascertain what circumstances tend to produce the chronic ulcers of the gut that by perforation of the intestinal walls usually give rise to them. Statistical inquiries have proved that duodenal ulcers are most common in the male sex, and chiefly occur between thirty and fifty years of age. Now, of eleven cases of duodenal abscess, nine were males and only two females; and only one occurred below twenty years of age, four between thirty and fifty, and three above fifty years of age. In all probability, ulcers in this, as in other parts of the gastro-intestinal tract, are most apt to perforate rapidly in the young, and it is only as age advances that there is a tendency to a slow process of ulceration, and consequently to the formation of adhesions and abscess around the gut. As duodenal abscesses may arise from so many different causes, it is evident that the symptoms and course of the disease must vary accordingly. Let us, then, first consider the cases that have been recorded as having resulted from simple ulcers in this portion of the intestinal canal. I have been able to collect only fourteen of this class in which a

[1] Holmes's System of Surgery, vol. i., p. 873.

history of the symptoms is given, and in some of them the details are unfortunately very scanty. They were all of long duration; thus, in one the symptoms of ulcer had existed for eight, in another for seven, in a third for three years, and in one for twelve months, whilst in three they are mentioned as having been present for "a long time." You will remember that we before found the ulcerations after death were always stated to have had thick or round edges, so that there is no doubt the quickly spreading ulcers destroy death rapidly, and it is only in such that have been long in a quiescent state that external adhesions occur and the formation of an abscess becomes possible. In all of the cases the patients had previously enjoyed good health, with the exception of one who had suffered from cough and slight hæmoptysis, and in whom, after death, emphysema of the lungs was found. Pain was the prominent symptom in the majority of the cases; in some it came on one hour or at a later period after food, in others it occurred occasionally, the patient being free from suffering in the intervals. In one instance it was looked upon as neuralgia of the cœliac plexus; in another the pain is described as radiating from the epigastrium to the right hip. In two cases there was no complaint of pain, but only a sensation of fulness after eating, until at last more severe symptoms suddenly made their appearance. Vomiting was present in most of the cases, but was by no means so general a symptom as pain. Usually the food last taken was alone rejected, with immediate relief of the pain, but in one case the fluid was intensely sour and the stomach was found after death to be much dilated. In the majority there was either hæmatemesis or blood was passed from the bowels. In some this occurred frequently, in others only once, but it was usually profuse, and in one the blood is mentioned as having been passed in dark clots. Loss of flesh was a prominent symptom in all the cases, and ulceration in this locality seems to produce a more marked effect on the general health than when the stomach only is affected. Want of appetite is not especially noted, but in one patient it is stated that the appetite continued good until near the termination of the illness, when it quite disappeared. Paleness of the skin is generally recorded as having been present; some are described as "anæmic," others as "earthy-coloured," and some were "like persons suffering from cancer." No doubt this anæmia arose partially from the hæmorrhages to which the patients were liable, but it must also be attributed to the disturbance of nutrition resulting from the ulceration. The cases as a rule, after continuing for a length of time, terminated suddenly. In only one the duration of the final attack was three weeks, when the patient died of pleurisy. Most of them were carried off by hæmatemesis or by perforation of the peritoneum, three sank from exhaustion, and one died of suppuration of the lungs and of the parotid gland. You would of course expect to find considerable differences in the symptoms and course of a duodenal abscess when this originated from irritation of the biliary passages, and when it was the result of a duodenal ulcer. I cannot show the distinction more clearly than by quoting the following case from our post-mortem records.

CASE 3.—A man, thirty-five years of age, had been affected with jaundice four years before his admission into the hospital. He stated that it had come on very gradually, and had lasted without intermission for nearly three years. At the end of this time he was attacked with a severe pain of the left side and across the abdomen, and on the subsidence of this the jaundice gradually disappeared. Five weeks before his admission he had a severe rigor, followed by delirium. When admitted he was suffering from jaundice, and a mass could be felt occupying the right side of the epigastrium, which seemed more clearly defined than would have been the case if it had consisted of an enlargement of the liver. The left lobe could be felt projecting below the ribs; the mass moved with the respiration, but the gall-bladder could not be distinguished. Four days after his admission he is stated to have had no pain, the stools were natural in colour, but he had been sick and had vomited. On the sixth day he had severe rigors followed by sweatings, the temperature reaching 103·4°; and severe rigors occurred again on the eighth day. On the tenth day jaundice was remarked as still remaining, and there were repeated rigors on the twelfth day. On the fifteenth day he complained of a peculiar sensation at the epigastrium, and brought up a quantity of dark-coloured blood. On the following day he suffered severe pain in the epigastrium, and rapidly sank. At the post-mortem examination, a gall-stone, the size of a filbert, was found to be impacted in the common duct; the gall-bladder was destroyed by suppuration, and a large sinus extended between the gall-bladder and the duodenum, which were united together along with the liver, in the substance of which were numerous abscesses; there was also an abscess deeply placed in front of the left kidney.

Now the first point that will strike you is that up to five weeks before the patient's illness he was in good health, for this is a marked difference from the long-standing pain, vomiting, and emaciation we before found in persons who were affected with an abscess produced by ulceration of the mucous membrane of the duodenum. There was also a history of chronic jaundice, from which he had recovered; and attacks of colic or of jaundice are also recorded as having been present in other cases of a similar nature I have been able to collect. A sudden onset had also been observed in them as in the foregoing case, and was no doubt dependent on the mischief set up by the irritation of biliary calculi. Repeated rigors did not constitute a prominent symptom in the former class of cases, but in that just related it was probably dependent on the formation of the hepatic abscesses discovered on post-mortem examination. In duodenal abscess arising from internal ulceration, hæmatemesis or the passage of blood by stool was one of the symptoms most commonly remarked, and I have also found one or other of these in almost all the cases I have been able to collect where the abscess had resulted from irritation of the biliary passages.

As regards physical signs, I have only been able to collect nine cases in which these are given with sufficient detail to allow of definite conclusions being drawn from them, and it should be borne in mind that a swelling is not likely to be detected when the abscess is situated very deeply, and that a tumour may, as we have before seen, present itself at a considerable distance from the duodenum when suppuration has extended into the connective tissue. A tumour was discovered in the epigastrium, or region of the liver, in seven out of the nine cases; in one it was situated in the right iliac region, and in one at the back of the right shoulder. It was mentioned as being visible in only three cases, but in all probability this point may have been omitted in the records of many others. It was "hard" in three, and "soft" or "elastic" in two. The note on percussion was "tympanitic" in four cases, and in one a metallic sound was produced by the shaking of the patient. In one the liver and heart are stated to have been displaced upwards by the large size of the tumour. Alterations in the percussion note are noticed in only one case, and in this it is said that the tumour remained fixed on full inspiration, but that the line of dulness varied according to the position of the patient. In one only is it mentioned that the contents of the tumour were influenced by the action of the intestines, the note on percussion being much clearer when diarrhœa was present. In some of the abscesses in which there is a communication with the duodenum, physical signs present themselves closely simulating those of pneumothorax, but we must defer their consideration until we examine the subject of abscesses connected with the stomach.

I need scarcely say that the diagnosis of an abscess connected with the duodenum must be a matter of great difficulty on account of the various conditions which may give rise to it, the different directions the pus may follow, and the great depth at which this portion of the intestinal canal is situated. But, in addition to this, it is very difficult to make out the exact limits or even the existence of a painful tumour situated in this locality, for the patient usually contracts his muscles directly pressure is made over it, so that they become as hard and unyielding as a board. When, however, you have been able to satisfy yourself of the presence of a tumour, you have to consider whether it is an abscess, carcinoma of the liver, stomach, or peritoneum, or perhaps only a fæcal accumulation.

In the first place, then, you must bear in mind that an abscess connected with the duodenum is, as we have before found, almost always the result of a very chronic ulceration of the gut, or of the irritation set up by gall-stones. In the former case, the patient will have suffered for many months or years from pain after food or from severe attacks of pain attended by vomiting, or from profuse hæmatemesis or the passage of blood by stool. In cancer the progress of the case is much more rapid, the patient seldom living more than nine or twelve months after its commencement; the pain is more constant; the anæmia and emaciation more

marked; the hæmatemesis, if present, more frequent and smaller in amount. In abscess near the gall-bladder the onset of the symptoms is sudden, the progress rapid, and there is usually a history of colic or of jaundice. In abscess from either cause the temperature is high, whilst in cancer it is often below the normal point. The tumour in duodenal abscess is less defined and more tender than in cancer, and percussion often affords a tympanitic note or a splash, as if the contents were composed of liquid and of gas, or, in other cases, the line of dulness varies with the position of the patient. In the case of fæcal accumulation the temperature is not elevated; there is a history of constipation; the tumour is dull on percussion, and when firmly pressed upon it seems to give way before the fingers, as though an indentation were thereby produced in its substance. When an abscess has commenced in the peritoneum, and afterwards burst into the gut, you will find, in addition to the signs of a tumour filled with gas or fluid, a history of diarrhœa and localised pain accompanied by fever, the temperature remains high, and the auscultation and percussion usually afford evidences of a tubercular condition of the lungs. We will defer our consideration of the treatment of these cases until we discuss the subject of abscesses connected with the stomach.

ON THE

REMOVAL OF DEEP-SEATED TUMOURS OF THE NECK.

By ARTHUR E. BARKER, F.R.C.S.,

SURGEON TO UNIVERSITY COLLEGE HOSPITAL, AND TEACHER OF PRACTICAL SURGERY AT UNIVERSITY COLLEGE.

IN THE LANCET for Jan. 30th of this year I ventured, under the above heading, to put forward some conclusions which appeared to me justified by a considerable recent experience, and which seemed to me not unworthy of note as bearing upon a question constantly cropping up in the experience of every practitioner—namely, what can be done for deep-seated tumours of the neck? Since the cases then recorded were operated on, others have come under my care which have strengthened the opinion there expressed, but none so much as the last. This involved the deepest and widest dissection I have ever made in the neck, and was, nevertheless, as complete an enucleation of a distinctly encapsuled growth as one could wish. It was accompanied by very little bleeding, and no important structures were divided. Again, the very extensive wound healed from bottom to surface everywhere by first intention, except in the track of the drainage-tube, and here only a drachm or two of thick serum was found every three or four days until it had closed, the patient suffering nothing from the wound, either locally or constitutionally, all the time. The following brief record of the case speaks for itself, and emphasises the conclusions in my first paper perhaps more strongly than the cases there narrated.

T. H——, aged sixty-four, a labourer from Cornwall, was admitted into University College Hospital on Feb. 22nd, 1886. His personal and family history were excellent, showing nothing but some rheumatism. He has had a family of six children, all of whom are healthy. Five years ago he felt a little pain in the nape of the neck, and a little later noticed a small lump between the left mastoid process and middle line of the neck behind. This lump appeared to be deep-seated and fixed, and grew very slowly until six months ago, when it began to increase rapidly, attaining double its former size since then. There has been from the first occasional pain in the tumour of a gnawing character and radiating to the back of the head. There is no history of a blow in the region of the swelling, and but an indistinct one of strain. The tumour is described in the hospital notes as reaching from the anterior border of the left sterno-mastoid muscle to the posterior middle line, and from the inferior occipital curved line above for about 4 in. downwards. It is thus 5 in. across and 4 in. vertically. Its upper limit corresponds to the insertion of the splenius capitis and trapezius muscles into the superior curved line. The anterior border of the latter muscle is very prominent below the growth, and can be traced over it for a little distance above. The tumour is very elastic, but does not fluctuate. There is very slight lateral mobility, but none from above downwards. The heart and breath sounds are normal.

Taking the above facts into consideration, together with the sensation of the tumour to the finger and its appearance, I had little doubt that we were dealing with a sarcoma. But the point of its origin, the degree of its limitation, and its exact depth in the neck were matters about which it was impossible to come to any definite conclusion. That it lay very deeply was quite clear, but whether it sprang from the base of the occipital bone, from the spinal column, or lay between the muscles, it was quite impossible to form an opinion. I thought it quite possible, however, that it might be found, on examination of its surface, to be quite separable from surrounding parts in spite of its depth, having been agreeably surprised in this respect in analogous cases more than once. I therefore explained the gravity of the matter to the patient, and that it was quite possible that it would be found to be beyond the reach of excision, but that this could only be determined by making an exploratory incision through the coverings of the tumour. It was pointed out to him that if this exploratory incision revealed the fact that the tumour could not be removed, it could be closed and would heal without any mischief being done. To this alternative the patient readily agreed, and the operation was performed a couple of days later. The preliminary treatment consisted in shaving and washing the whole of the occiput several times with warm water and soap, then with a solution of perchloride of mercury (1 in 500), and finally soaking it with carbolic acid solution (1 in 20).

Operation.—On Feb. 24th, with every antiseptic precaution except the spray, an incision was made, commencing about an inch above the superior curved line of the occipital bone and an inch from the middle line, and running downwards and outwards for about two inches, and then directly downwards for three inches. This was designed to expose the origin of the trapezius and its anterior border. When this muscle and the splenius capitis had been exposed, it was found that the latter was more directly in the way than the trapezius. It was therefore slit upwards in the direction of its fibres nearly to its insertion, and the inner portion thus separated was divided transversely above. On everting this portion, the tumour was well seen, still covered by a very thin layer of muscle fibres derived from the complexus. These were now torn across at their superior attachment to the bone, and the finger was insinuated between the latter and the growth. As the bone appeared quite unimplicated, the finger was carried deeper and deeper until the insertions of the rectus capitis posticus, major and minor, and obliquus superior were reached. Just here I was for a little time uncertain whether the dissection should be proceeded with, but, finding the other aspects of the tumour were quite well defined in a capsule, I continued its separation from the small rotators until the spinous processes and ligamentum nuchæ were reached. The tumour lay directly upon these, and here the attachment was firmest. Some steady clearing with the finger, however, loosened it cleanly, and then it was separated from the transverse process of the "axis," which was commencing to be absorbed by pressure. Lower down it was not at all difficult to isolate it from the complexus and inferior oblique muscles, and it was soon cleared and lifted out. Just at the last, in lifting out the tumour, two small fragments were broken off, each about the size of a flattened pea; these corresponded to a spinous and transverse process. Except at the points where they came away, the capsule was unbroken and well defined, so that every particle of the growth shelled out. It may be said to have lain upon the occipital bone between the superior and inferior curved lines, lower down, directly upon the four short rotators of the skull on the left side from their origins to their insertions; the ligamentum nuchæ and interspinous ligaments were pushed over to the right by it, and the splenius capitis and trachelo-mastoid to the left, while the body of the growth corresponded to the bulky part of the complexus at its upper end. Part of this muscle was expanded over the growth posteriorly, and over this again was stretched the trapezius. Apparently, then, the mass grew from or beneath the under surface of the complexus. The only vessels distinctly troublesome were found in the upper angle of the scalp wound, where the branches of the occipital were divided and required ligature. Besides these, some few muscular twigs were closed by forcipressure, and one or two venous twigs in the deeper part of the wound. The total loss of blood probably did not exceed four ounces, most of it being

derived from muscular oozing. The field of operation, having been dried out, was dusted lightly within and without with iodoform, and was closed with five silk sutures, a drainage-tube being left in the lower angle, reaching about four inches down to the small rotators. Strips of salicylic wool were then laid on either side of the incision, and others across these, until a thick even covering enveloped the whole occiput. Then a large quantity of ordinary wool was carried over this and under the chin, and was firmly bandaged so as to support the head on all sides and prevent movement, as well as to exercise elastic pressure on the large wound and bring all its surfaces into contact. Over this a kind of cuirass reaching from the waist to the occiput, consisting of poroplastin moulded beforehand to the body, was applied, and the shoulders and head were further immobilised by bandaging to it.

The patient bore the operation well, and after a rather restless night became quiet. He was inclined to become restless again, but this was probably due to his disposition, otherwise his state was very satisfactory, and he slept well, as a rule, after a little morphia. The temperature rose on the third night to 101·4°, the night following to 101·6°, but on the next night only rose to 100°, and remained below this figure for the rest of convalescence. The wound was dressed for the first time on the fifth day, and was found quite quiet, without a trace of discharge. The drainage-tube was withdrawn, cleared of blood-clot, shortened to about two inches, and replaced. The same form of dressing as before was applied. Two days later it was examined for the second time, and the tube was removed for good, as only a little thick serum was found. It was dressed as before. Four days later the wound was dressed for the third time. It was found united everywhere by first intention, except where the drainage-tube had been inserted. Here about a drachm and a half of thick odourless serum had exuded. The stitches were all removed and the same dressing was reapplied. After the next dressing, which was two days later, there is nothing to note, only one small spot remaining unhealed at the time. The patient was out of bed on the twelfth day, and each day until he left hospital on the seventeenth day. For about a week before leaving he had complained of severe rheumatic pain in the right arm, probably due to the cold March weather, when he began to sit up after lying wrapped in wool. This was improving when he left for Cornwall. At this time he seemed almost to have forgotten his old trouble in the neck, but made a good deal of his rheumatism. The microscopical examination of the tumour showed it to be a myxo-sarcoma. From a letter received lately from the patient's medical man in Cornwall, I learn that the result of the operation is most satisfactory.

A CASE OF

RHEUMATIC HYPERPYREXIA, WITH NERVOUS SEQUELÆ, SIMULATING MULTIPLE SCLEROSIS.

BY ARTHUR FOXWELL, B.A., M.B. CANTAB.,
ASSISTANT-PHYSICIAN (LATE RESIDENT MEDICAL OFFICER) TO THE GENERAL HOSPITAL, BIRMINGHAM.

ON the evening of Sept. 27th, 1884, I admitted W. J. S——, aged thirty-three, married, sadler, into the General Hospital, under the care of Dr. Russell. He was one of a family of fourteen, twelve of whom were alive and well. His father was sixty-four years of age, and healthy; his mother died of "consumption of the bowels" at the age of fifty-six. He had lived in Birmingham sixteen years, and had been more subject to colds during this period than formerly, though he was always considered a delicate child. Twice he was attacked with inflammation of the lungs, fifteen and twelve years since respectively. Seven years ago he was unable to do any work for a fortnight on account of "dizziness and dyspepsia." Otherwise his previous history was good. His present illness commenced fourteen days before as a chill with severe pains in all his joints which had obliged him to keep to his bed. On the 25th his wife noticed pimples (sudamina) all over his body. At 6 P.M. on this day he became very hot and half unconscious; he was deaf, but could see; his breathing was noisy and rapid. He remained thus till 3 A.M. on the 26th. At 6 P.M. on this day a similar attack occurred, but only lasted an hour and a half.

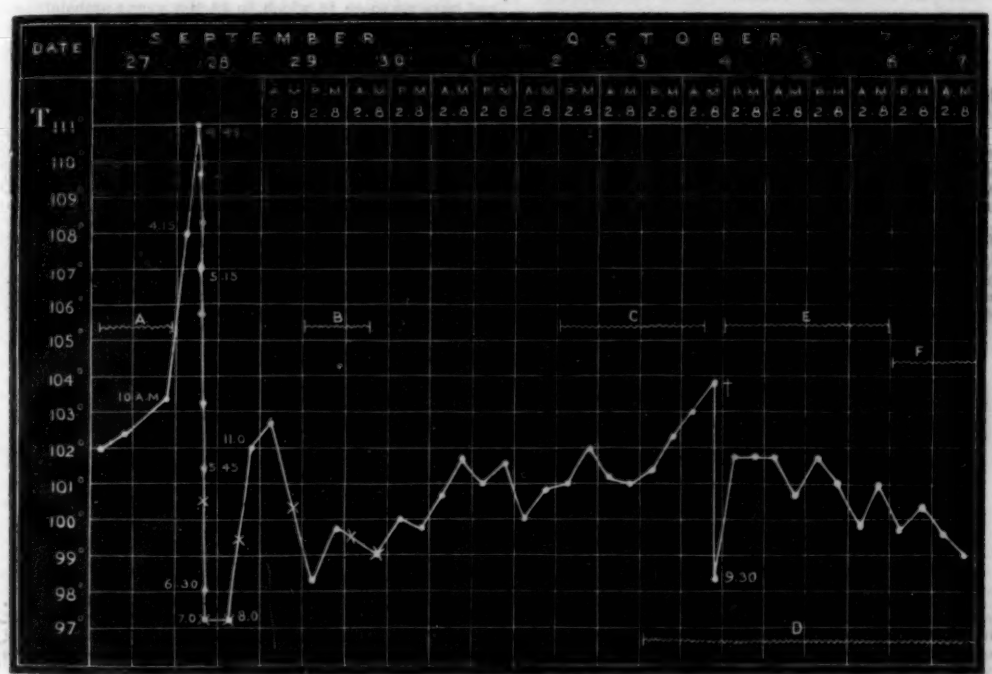
My note on admission was as follows: "Well-formed man; body covered with sudamina, and there is a free acid sweat; complains of pain in his joints; the ankles, knees, and wrists have effusion; slight dyspnœa. Heart: area normal; apex a confused repetition of impulses; to the stethoscope sounds are cantering and feeble, with probably a systolic mitral. Lungs, liver, and spleen apparently normal."

Sept. 28th.—10 A.M.: In much less pain, but complains bitterly of thirst. Sordes about the mouth. Temperature higher, 103·2°; pulse 96; respiration 26. I saw him at this time in the course of my morning round, and must confess to having noted nothing beyond a more than usually severe attack of fever, though the lessening of pain should have aroused my suspicions.—Noon: Salicylate of soda (which he had been taking since admission) stopped, because he was slightly deaf and appeared rather light-headed. He had had 140 grains in all. From 2 to 4 P.M. his friends were with him, as it was visiting day. His wife says he answered her questions, but he states that he remembers nothing after the giving out of the dinners at 1 P.M. — 4.15 P.M.: I was sent for, and found him quite unconscious. Pupils contracted and insensitive; skin burning; respiration 90, and noisily stertorous; pulse 200, full and bounding, but beats quite distinct, though tumultuous; temperature in axilla 108°; a loose stool in the bed. — 4.45 P.M.: Immersed in bath at 90°, which was cooled to 70° in fifteen minutes, and then maintained at 70° to 75°; lumps of ice kept floating around his head, which was also completely immersed except nose and mouth.—5.45 P.M.: Removed from bath. During his stay in it the pulse kept good and distinct, though its tension and size much diminished, especially towards the latter part. Towards the end, too, his vocal cords began to act, and he moved as if conscious of pain, although his pupils still remained insensitive; stertor also vanished, and he breathed quietly.

All the temperatures above 105° were taken with two thermometers, whilst the highest (111°) was taken with three. Those from 4.45 P.M. on the 28th to 2 P.M. on the 29th, inclusive, were rectal, the rest axillary. (See accompanying chart.)

Oct. 3rd: Has been in a mental state of very little change —one of dull puzzledom. Sordes and sudamina are gone. Joint effusion has almost entirely vanished, though he still complains of pain. Heart has feeble first sound at apex.—9th: Still in a fog as to time past, though quite clear-headed about the present. Great difficulty in enunciating consonants; intonation is nasal, though the soft palate moves well; speaks slowly and very laboriously. No paresis of any kind noted in limbs. Knees stiff and painful.—13th: Speech better, but still nasal; each word is hung upon; reflex movement of soft palate very deficient, but voluntary movement and localisation good. Pupils large, but react well to light. Knee-jerks normal.—20th: Talks sensibly, but with convalescent childishness. Grasp of hands equal, but feeble; well-marked rhythmic tremors on attempting to bring an index finger to the tip of the nose, these increasing as the hand nears the face. Knee-jerks exaggerated, especially on the right side; ankle-clonus is well marked on the right, slightly so on the left; plantar reflexes normal. Walks too feebly to make out any tremors; there are probably none; he brings his feet down with a helpless flop. Sensation to touch is quite good everywhere. No nystagmus; no contraction of field of vision; no ocular paralysis. Smell and taste good. A primary interrupted current strong enough to produce a moderate contraction on a healthy neighbour acts rather less well on the patient, but all his muscles react equally well.—21st: He measures his words, though not rhythmically. Says "stresh" for stretch, "cloch" (German *ch*) for clock. Has much difficulty in pronouncing *l*, and the *m* in "many." His lips do not respond actively to the will, the upper being comparatively immobile. —22nd: Less tremor in arms. Articulation is perceptibly scanning to-day. — 25th: No rheumatic pains left, but general stiffness in all his joints. Can walk alone, but feebly and with a somewhat ataxic gait. Right leg is the more affected. He has no woolly sensation beneath his feet. Pupils are large and indolent, with some deficiency of accommodation. There is slight nystagmus on extreme rotation out or in. Articulation is tardy and indistinct still;

the tongue seems most at fault.—Nov. 5th: Right arm much better; can pick up a pin, but doing so produces tremor. Left arm much the same. Walks very feebly, but lifts his feet well, though he puts them down too abruptly. Walking at once causes giddiness. Speech of same character, but much clearer and less laboured; he stutters occasionally before an *s*. — 25th: Speech still nasal and palate reflex deficient. All his joints are stiff, and he cannot fully extend his knees. His right foot is especially painful. Complains of the tremors in his arms; they prevent him writing his name even when he attempts to do so unobserved. Can walk with his eyes shut.—Dec. 30th: Words are still slurred, and the difficulty with the gutturals and labials continues. Palate reflex is now not deficient; uvula is drawn to right in saying "Ah"; tongue is protruded to left, but withdrawn in either direction; left side of the mouth is rather indolent.



The patient was in a bath one hour: from 4.45 till 5.45. On removal, he was wrapped in a cold pack and an ice-cap applied. At 6.30 the pack was removed, and twenty grains of sulphate of quinine were given. At 7.0 the ice-cap was removed. At 9.0 the ice-cap was reapplied. At 11.0 twenty grains of sulphate of quinine were given. At the times indicated by the crosses (x) he vomited. From admission till noon on the 29th he had seven loose stools; thereafter his bowels were confined, and his average daily excretion of urine from September 29th to October 3rd, inclusive, was thirty-six ounces. At † a cold pack was applied, and continued for an hour and a half.

Line A represents the period during which twenty grains of salicylate of soda were given twice.
Line B " " ten grains of sulphate of quinine were given four times.
Line C " " one grain of sulphate of quinine and ten grains of bromide of potassium were given four times.
Line D " " three ounces of brandy were given daily.
Line E " " six grains of kairin were given every hour.
Line F " " ten grains of salicylate of soda, four grains of carbonate of ammonia, and four minims of tincture of digitalis were given twice.

Can walk fairly well, but is still very weak, and trembles all over on exertion; knee-jerk remains much exaggerated; the plantar reflexes are also increased. On attempting to produce ankle-clonus, a regular rhythmical tremor is set up. There is deficient sensation at a spot in front of the right ankle. His grasp is tremulous and feeble.

On Jan. 1st, 1885, he was sent to a convalescent home. As to treatment, he had phosphate of iron, cod-liver oil, and strychnia. His urine on Sept. 28th was as follows: sp. gr. 1020; acid; much urates and uric acid; cloud of albumen; no sugar; granular casts, a few epithelial casts, and some loose epithelium. On the 30th it was: sp. gr. 1030; very acid; urates; very faint cloud of albumen; no sugar or casts. The cloud of albumen remained till the end of October, and then the urine became normal. His heart was unaffected throughout, the murmurous first sound heard during the first week being due no doubt to the pyrexial state.

Dec. 30th.—Has been able to do his work ever since he left the convalescent home in February, though not so well as before his illness. His temperature sense is peculiarly modified. The body generally is less sensitive to changes in the surrounding atmosphere than it used to be; he has no need to be so careful about wrapping himself up, and is less liable to catch cold; has no transitory shiver—e.g., on coming out of his hot shop; is better able, though to a correspondingly less degree, to bear the heat of summer, and he flushes more readily, though the tendency to perspire is unaltered. On the other hand, his perception of hot and cold substances locally is keener; a hot plate feels considerably hotter than before, this being especially the case with the left hand. This left hand is also more sensitive to cold (e.g., snow) than it used to be, whereas in the right he detects no change in this sensation. [Thus the right hand and left leg are, in all the variations noted, less affected than the left hand and right leg.] He does not seem to perceive the sensation more *speedily* than usual, but when it is perceived the sensation is stronger. Pen-points less than one-eighth of an inch apart on the finger-pulps are felt as one, the pulps being no more sensitive than the rest of the fingers [the skin of the finger-pulps is very horny]; on the dorsum of the feet points less than one inch apart are felt as one. The front of the right ankle still feels numb. Localisation of one point is quite correct. Can walk very nearly as well and as fast as ever he could, but can no more run than a baby, his feet refusing to "go into the right shape." His legs do not give, but he occasionally staggers, though the merest touch of any support at once

steadies him; the staggering is no worse in the dark; the knee-jerks are now only slightly exaggerated; the left leg is under better control than the right; there is little fault, however, to find with either. Any delicate work makes his hands shake—e.g., picking up tacks or cutting leather; to write is hardest of all. This tremor is worse when he is watched, and sometimes is entirely absent. He has less control of the left hand than of the right. His speech is hesitating occasionally; no stuttering nor scanning. His voice is a little thick, and the words slightly slurred; these come to his mind readily enough, "but something in my mouth seems to stop me from speaking." There is distinct paresis of the left side of the mouth. Has noticed no difference in his sexual powers, and has lately become a father. Has had no difficulty with the bowels or bladder. Electrical reactions fairly normal. The following were the results with the constant current of a Stöhrer's battery:—

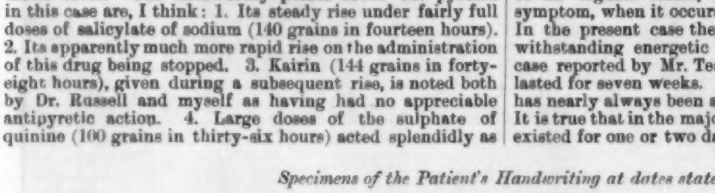
R. extensor indicis—C.C.C. with 10 cells; A.C.C. with 12 cells.
L. extensor indicis—C.C.C. with 18 cells; A.C.C. with 22 cells.
R. tibialis anticus—C.C.C. with 22 cells; A.C.C. with 26 cells.
L. tibialis anticus—C.C.C. with 18 cells; A.C.C. with 24 cells.

He has not been subjected to treatment of any kind since he left the hospital.

Remarks.—Recovery after a rectal temperature of 111° is, as far as I can learn, of extremely rare occurrence in rheumatic fever. The noteworthy points about the pyrexia in this case are, I think: 1. Its steady rise under fairly full doses of salicylate of sodium (140 grains in fourteen hours). 2. Its apparently much more rapid rise on the administration of this drug being stopped. 3. Kairin (144 grains in forty-eight hours), given during a subsequent rise, is noted both by Dr. Russell and myself as having had no appreciable antipyretic action. 4. Large doses of the sulphate of quinine (100 grains in thirty-six hours) acted splendidly as a stimulant, the effect of the first dose of twenty grains being especially marked, whilst none of the ill effects of cinchonism were noted. I believe it was also a very active antipyretic. 5. The employment of cold water, as instanced by the pack on Oct. 4th as well as by the bath, was by far the most potent agent in reducing the temperature. 6. Was the running up of the temperature on Oct. 4th in any way due to the brandy? Did it affect injuriously the thermic centre by dilating its arterioles? It was the first alcohol he had taken since admission. 7. The pyrexia had great persistency. The two attacks of semi-consciousness previous to admission were no doubt attended with high temperature, and it was not until after ten days of antipyretic treatment that the normal was reattained. 8. The pyrexia did not return during his stay in hospital—three months. Morning and evening temperatures were taken.

If I may venture to suggest anything as to the method of employing cold water as an antipyretic, I would say its action is often not sustained for a long enough period. In the present case I was strongly advised to remove the patient from the bath twenty minutes before I did so; I believe I should have acted more wisely if I had detained him in it thirty minutes longer, raising the temperature of the water gradually to blood heat. But the nervous affections form by far the most interesting feature of the case. They were too permanent to be explained as mere functional derangements due to the action of the hyperpyrexia. They must have been the result of some organic lesion, probably an inflammation set up by the rheumatic poison. We know this can widely distribute its influence and attack various regions of the body—e.g., lungs, heart, muscles, joints, skin, &c. It seems remarkable, then, not that the nervous tissue should sometimes be affected, but that this affection should occur so rarely. Briefly these nervous affections may be summarised as follows:—1. Paresis of some of the muscles supplied by the twelfth, ninth, and seventh cranial nerves on both sides of the body. 2. Some loss of the motor and coördinating power in all the limbs, but chiefly in the left arm and right leg (cross paralysis). 3. An alteration of the temperature sense. 4. A lessening of the liability to catch cold. A diffused inflammation of moderate intensity occupying the substance of the medulla and lower half of the pons would account for these conditions, and seems to me to offer the most probable explanation of their cause. The changes in the temperature sense, while both that of locality and common sensation remain practically unchanged, are of extreme interest. I cannot help accepting the patient's statements with regard to them as facts, for he is a man of great intelligence and volunteered them to me unasked. I can offer no simple explanation of their somewhat contradictory nature, and have no space in which to discuss vague probabilities. My own inclination is to suppose a thermic centre (as advocated by Maclagan) with special centripetal nerves, that this centre is functionally and anatomically closely related to the vaso-motor centre, and that it has been morbidly altered by the same inflammation which I believed produced the other nervous affections. Disturbance of a thermic centre will also account for the hyperpyrexia. In favour of this view that hyperpyrexia is due to an organic lesion, it must be remembered that this symptom, when it occurs, is by no means a transitory one. In the present case the tendency existed for ten days, notwithstanding energetic antipyretic measures, and in the case reported by Mr. Teale[1] a temperature never below 108° lasted for seven weeks. In fact, in cases which recover it has nearly always been a symptom of considerable duration. It is true that in the majority of the reported cases it has only existed for one or two days, but this is because the death of the patient gave it no chance of continuing longer. Again, in all the cases of which I can find complete records, other definite signs of bulbar mischief exist. This lends additional likelihood to the suggestion that hyperpyrexia itself may be due to lesion of the medulla.

Specimens of the Patient's Handwriting at dates stated.



Not much weight can be attached to the absence of any observable nervous lesion post mortem in Dr. Ringer's cases;[2] in fact, such could hardly be expected, since in the longest instance hyperpyrexia only lasted some forty-eight hours. Besides, no one at present could receive the most carefully proved post-mortem negation as an absolute one. The post-mortem examination on Dr. Bristowe's piquante and redoubtable "Marion"[3] (who had ophthalmoplegia externa, right hemiplegia and anæsthesia, epileptiform attacks, &c.) made all those who had watched the aberrant manifestations of her life ask with increasing scepticism the question of jesting Pilate, for the most painstaking investigations of Dr. Hadden enabled him to discover nothing worthy of the very least of them all.

My lovingly esteemed master, Dr. Russell, was about to publish this case himself when death took him from us; many of the most valuable notes are in his handwriting, and for these I am indebted to his son, my friend, Mr. James Russell.

[1] Trans. Clin. Soc., vol. viii., p. 98.
[2] Medical Times and Gazette, Oct. 8th, 1887.
[3] Brain, Oct. 1885.

THE ACCIDENT TO MR. WILLIAM ADAMS.—We are glad to learn that the accident which happened to Mr. William Adams at the Colonial and Indian Exhibition last week is of a less serious nature than was thought probable. The wound in the hand is healing rapidly, and is not likely to result in any permanent injury.

ON A CASE OF LITTRE'S HERNIA.

BY JOHN H. MORGAN, F.R.C.S. ENG.,
ASSISTANT-SURGEON TO CHARING-CROSS HOSPITAL.

IN a paper on a New Form of Hernia published in the "Mémoires de l'Académie Royale des Sciences" in 1700, M. Littre described a condition of incarceration of intestine which had not been previously recorded, except by Hildanus in 1598. Littre's attention was first attracted by the case of a stout man, aged forty-eight, who died suddenly with a hernia in the left groin. He found a part towards the end of the ileum arrested in the sac of a hernia, which could not be easily withdrawn, although not adherent. The whole circumference of the intestine did not form this hernia, but only the portion opposite to that which is immediately attached to the mesentery. Thus the continuity of the canal was not interrupted. There arose also a lengthening of that part of the intestine engaged in the ring, so as to cause the formation of a sort of appendix of conical shape with a large base below, and communicating at its upper part with the cavity of the ileum. Its thin walls and fine vessels showed it to differ in structure from a naturally formed appendix. In a second observation, he found in a man who died of fever, aged thirty-four, a hernia, not strangulated, formed by an appendix of the ileum, which alone was engaged in the ring, whilst the rest of the circumference of the body of the intestine remained free. A third instance is related of a man with a tumour in the left groin, of which he died in five days. This it was difficult to recognise as a hernia, since the man had no distension and was hardly inclined to vomit. Owing to decomposition, the parts did not reveal the exact state, but probably the same condition existed as in the other two cases. Among other causes for strangulation of these herniated appendices are the thickness and weight of the material which accumulates in them, which are unable to regain the continuity of the gut through the narrow opening, and are unaided by the intrinsic muscles of the appendix, which have lost power from distension, or by the extrinsic forces of the abdominal walls, which can no longer act upon them. The condition, then, which Littre described, but which has since acquired a rather loose signification, is one in which a section of the gut is forced into a hernial opening and, becoming distended and enlarged, forms a distinct appendage. The condition has been frequently described, and is not one of very uncommon occurrence. The strangulation of this part is very frequently followed by gangrene, owing perhaps to the delay which may ensue from the difficulty of recognising the condition and the anomalous nature of some of the symptoms. That gangrene is not necessarily the cause of a fatal issue, and that this may ensue from other causes, are shown by the following case, which is one of considerable interest and instruction.

I was asked by Mr. Humphry, of St. George's Dispensary, to see with him an elderly woman, who stated that her age was sixty-four, although she looked even more advanced in years. She stated that she had been a domestic servant, and had generally enjoyed good health. For some two or three years she had been losing flesh, during which time she had been of constipated habit, for which she had resorted to aperient medicines. At various times she had passed blood per rectum when at stool, but never to any great amount. There was no family history of phthisis or of malignant disease. Seven days prior to my seeing her, finding herself constipated, she took her usual remedy, which was followed by an action of the bowels, and this was again succeeded by a more obstinate constipation. She was treated at first with purgatives, and subsequently by enemata. Nothing, however, had passed with the exception of some blood in streaks and mucus, which was accompanied with tenesmus. She had vomited a little dark material, which was not stercoraceous. There was some pain, constant but by no means urgent, referred to the umbilicus. There was no hiccough. We found the patient lying on a rough bed in an underground ill-lighted room, and in a very feeble condition. Her emaciation was extreme, so that, in the words of the registrar's report, the body appeared free of all fat. She was sent by my advice to Charing-cross Hospital, where she was seen by myself and colleagues the same day. Her condition was one of extreme feebleness and exhaustion, but the more thorough examination which was available under these circumstances revealed the fact that there was no local tenderness at any part. The abdomen was moderately distended and tympanitic; no peristaltic action of the intestines could be observed. Nothing could be detected at any of the usual sites of hernia, but a large flaccid protrusion of the vagina evidently containing intestine, and at the apex of which could be seen the minute os of a very atrophied uterus, passed from out beyond the labia. This was reducible with the simplest pressure, and it seemed evident that nothing in the condition of its contents was giving rise to the symptoms. The walls of this protrusion as well as the labia were covered with dry crusts of secretion, which had in some places come away, exposing small weeping excoriations. No tumour could be detected in the abdomen, and palpation gave rise to no pain, nor was there any indication as to the seat of mischief. Her eyes glistened brightly, but there was a marked facies Hippocratica. Such was the state of collapse that no operative measures could be undertaken. She was ordered a pill containing opium and belladonna, and if she improved an injection was ordered to be administered. Her temperature was 97° and pulse 92. No flatus was passed per rectum. On the following morning the temperature was 98° and the pulse 100. She was somewhat less feeble and complained of no pain. She had twice vomited, and though the material thrown up was only suspiciously stercoraceous on the first occasion, it was undoubtedly so on the second. I again carefully examined the abdomen, but with a negative result. I observed, however, a very slightly enlarged gland about the middle of Poupart's ligament, which had not been noticed the previous day. This might be due to an excoriation of the corresponding labium, but in view of the symptoms I carefully examined the femoral region for any sign of hernia, which, owing to her great emaciation, might be expected to be manifest, however small the protrusion. No sign either of tenderness or of difference from the corresponding region could be detected. Nevertheless, I felt strongly tempted to cut down and explore the femoral region; but after consultation with my colleagues, and after giving due weight to all the previous history and the present symptoms, I determined to cut down upon the colon in the right lumbar region, and, should this be found empty, to perform laparotomy and seek the cause of obstruction. This was accordingly done; the colon was immediately found, but its collapsed condition showed plainly that the obstruction was situated above the commencement of the larger bowel. No time was lost in closing the wound after the bowel had been examined, and no blood was lost; but it was evident that the patient would not bear any further operation, and I was obliged to relinquish the hope of relieving her. She was sent back to bed, and died the following morning.

Necropsy.—Lungs œdematous at bases and emphysematous throughout. The left ventricle of the heart was hypertrophied, the muscular tissue soft and flabby. Abdomen: The upper part of the small intestine down to within ten inches of the cæcum was distended with flatus. At this portion a very small portion of the circumference of the gut had passed into the femoral canal on the left side, where it was impacted and fixed. There were no adhesions; the herniated portion was very slightly discoloured, and showed no sign of becoming gangrenous. The lumen of the gut was continuous, but the part beyond was collapsed and smaller than that above. There was also a number of coils of small intestine in a pouch behind the uterus, which was prolapsed beyond the labia. There was no peritonitis. The uterus was exceedingly atrophied, and the os would hardly admit the point of a hairpin. There was advanced rheumatoid arthritis in both hip-joints.

The diagnostic symptoms which Littre gives as distinguishing this form of hernia are—(1) that the patient regularly discharges his motions, since there is no interruption to the continuity of the canal; (2) that there is seldom hiccough, and vomiting is less frequent than in ordinary hernia, and never stercoraceous; (3) that the abdomen is neither large nor distended; (4) that the tumour increases more slowly and never attains a large size; and (5) that the inflammation, pain, fever, &c., take longer to show themselves, and are less violent. With regard to the first of these symptoms, it could be gathered from the woman's account that, as far as previous history went, there was good reason to suspect malignant disease. To this explanation her age,

the extreme emaciation, the habitual constipation becoming more and more pronounced, and the passage of blood and mucus all seemed to point. Hiccough was never present, and the vomiting did not occur till late in the period of illness, and was only stercoraceous on the day preceding death. At no time was the abdomen distended or painful, and, though not stated by the patient or those around her, it is to be presumed that flatus made its escape through the continuity of the gut. There was no tumour to be found at any period; and the only indication of anything like inflammation was the slight enlargement of an inguinal gland on the second day of her being in the hospital, which might readily be attributed to the excoriation of the labium. Strong as were the probabilities of hernia, this was the single indication as to its possible situation.

The intense collapse of the patient was a restricting influence as regarded operations, but under the circumstances there were three proceedings which might be undertaken: (1) herniotomy in the left femoral region; (2) laparotomy and exploration of the abdomen and its contents; and (3) colotomy, on the presumption that a malignant stricture existed in some portion of the large intestine. The first of these measures I rejected, though with some reluctance, since the indications, not so much of hernia as of its site, if existent, rested upon very slight foundation. Had it been adopted, the condition of the parts makes it probable that the herniated segment of gut, even if detected, could hardly have been satisfactorily dealt with. The second proceeding would, I think, have been the proper course to adopt in a patient less exhausted, or in a younger person suffering from similar symptoms. By following up the collapsed intestine, and thus ascertaining the cause of obstruction, a very slight force would have sufficed to draw the small herniated portion of gut out of the femoral canal. There must, however, even with the greatest care, be a certain amount of shock attending any such operation; and there is little reason to suppose that the patient could have borne such a proceeding, as shown by the result of the milder measures which were adopted. I was driven, therefore, to resort to the proceeding which had at least the merit that it offered less shock to the patient, and if successful would afford a chance of present relief and possibly of prolonged comfort.

NOTES OF CASES OF
PUERPERAL CONVULSIONS TREATED WITH PILOCARPINE.

BY JAMES MURPHY, B.A., M.D., &c.,
LECTURER AT THE UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, AND SURGEON TO THE SUNDERLAND INFIRMARY.

IN connexion with the case of successful treatment of puerperal eclampsia by pilocarpine recorded in THE LANCET of April 3rd by Dr. Horrocks, the notes of the following cases may prove of interest.

CASE 1.—On Nov. 27th, 1885, Dr. Prowde asked me to see Mrs. C——, aged thirty, at the Sunderland Workhouse. She was admitted on Aug. 20th, and was eight months pregnant with her first child. A month before I saw her she showed signs of œdema, and this continued till Nov. 27th, when she was seized with violent convulsions, which recurred every twenty minutes, and then she at once lost all consciousness and could not be roused in the intervals between the fits. Her breathing was markedly stertorous; her pulse 120, hard and wiry; her face, trunk, and extremities very much swollen; and the small quantity of urine removed from the bladder became almost solid on the addition of heat and nitric acid. The cervix was hard and had not been taken up; the os would admit a No. 12 catheter; the vagina was dry; and, in fact, there was no sign of labour. A third of a grain of pilocarpine was at once injected beneath the skin of her arm; within two minutes saliva commenced to pour out of her mouth, necessitating the use of a tin vessel to catch it in; and within five minutes she was in a profuse perspiration all over her body, the drops standing out on her forehead and chest like large beads. She had a slight convulsion shortly afterwards, which was the last she had, and obviously the question at once presented itself, Should labour be induced or an expectant treatment followed? After anxious consideration, Dr. Prowde and I decided that it would be hopeless to permit pregnancy to continue in a completely water-logged woman, quite comatose, who had already had some twenty convulsions, and with her breathing and pulse as mentioned. The cervix was accordingly gently dilated with the finger, a Barnes's bag introduced, then another, and so on till the os was fully dilated, which occupied a little over two hours, when Tarnier's new forceps was applied, and a living male child delivered, chloroform having been freely administered the whole time to prevent muscular movements and to assist the pilocarpine to lessen arterial tension. She continued insensible and almost maniacal for two days, on each of which she had a third of a grain of pilocarpine, which roused her and made her more sensible for some hours, and she then rapidly improved, the urine gradually becoming freer from albumen, till at the end of a fortnight it was normal, and at the end of a month, thanks to Dr. Prowde's skill and attention, she and her child left the workhouse, both quite well. She had suffered for many years from right facial paralysis and slight deafness on the same side, which were in no way affected by the attack or the treatment.

CASE 2.—On March 6th, 1886, Dr. Coatsworth Watson sent me an urgent message to come to assist him with a lady, aged twenty-eight, who had gone a fortnight beyond her calculated time with her first child. She had spent an excellent pregnancy, and on this day had been out for a walk, but complained very much of headache, and latterly had some swelling of the legs. An hour before I saw her she was suddenly seized with a convulsion, and lost all consciousness. On Dr. Watson's arrival he at once administered chloroform, without producing any effect on the convulsions, as (though I was summoned by telephone and arrived very shortly after him) she had had four fits during its administration, and as I entered the room was in one of the most violent convulsions I have ever witnessed, and appeared to be on the point of death. A third of a grain of pilocarpine was quickly injected, which acted rapidly, and she had no more convulsions during her labour, but it was deemed safer to continue the chloroform; her pulse was almost imperceptible, ranging from 140 to 150, and her breathing stertorous. On examination, the head was found well down in the pelvis, and the os thin and of the size of a shilling; an ounce of urine was drawn off highly charged with albumen. Having rapidly but carefully discussed all the circumstances of the case, Dr. Watson and I decided to at once rupture the membranes, and to introduce the largest sized Barnes's bag, which, as the pains were very strong, was expelled in about twenty minutes, when Tarnier's new forceps were applied and a dead male child delivered. Two hours later a second third of a grain of pilocarpine was administered as a prophylactic, and all went on well for twenty hours, when she had a slight convulsion, necessitating the administration of a third dose of pilocarpine, after which Dr. Watson placed her on a mixture of jaborandi, which in a few days was changed for tincture of the perchloride of iron and spirit of nitrous ether, and under his skilful and judicious care she made a speedy and excellent recovery, the albumen disappearing on the fifth day.

CASE 3.—On April 14th, 1886, Dr. H. Shapter Robinson kindly asked me to see a primipara, aged twenty-one, whom he had attended ten hours previously in her first confinement, all going on well. Shortly after he left the house convulsions set in, and occurred every half-hour up to the time of our visit, when we found the patient in a dazed condition, with widely dilated pupils; but she could be roused to answer questions fairly well. A third of a grain of pilocarpine was at once injected into her arm, and in a few minutes the characteristic salivation and diaphoresis occurred; and with the exception of one slight convulsion afterwards all went on well under the able and efficient treatment of Dr. Robinson, who, on the occurrence of the last-mentioned convulsion, injected a second dose of pilocarpine. Mother and child continue in excellent health.

This case makes the sixth that I have treated with pilocarpine, the first five being very severe cases; and I am thankful to say all the mothers made excellent recoveries, and four of the children were saved and are now alive.

My first case occurred in my own practice on March 30th, 1883: a multipara aged thirty-nine, in her tenth pregnancy. She had nine convulsions before being seen, and was comatose and œdematous. The urine contained a large quantity of albumen. One-third of a grain of

pilocarpine was administered every six hours. Labour came on twenty-four hours after the first visit; child dead. The mother became conscious next day, and rapidly recovered. My next case occurred on June 6th, 1883, in a patient of Mr. Morgan's, a multipara, aged twenty-eight, seven months pregnant. She had thirty-three convulsions. The urine contained a large quantity of albumen. Chloroform and other remedies failed. One convulsion only occurred after the administration of pilocarpine. Pregnancy went on to normal length; living child. These two cases are recorded fully in the *American Journal of Obstetrics* of December, 1883, and an analysis of the urine in the second case is given, showing how the urea was diminished.

The third case occurred on March 27th, 1884, and is recorded by Dr. Ridley Dale in the *Medical Press and Circular* of April, 1884. The urine was very much reduced in quantity, but at the onset there was no albumen, which, however, appeared in a few hours. Pilocarpine having been administered, the convulsions ceased; but they returned next day, when the drug was again administered, with cessation of the convulsions. Both the mother and child did well.

These six are the only cases of eclampsia I have seen during the past three years, and in their treatment pilocarpine has acted so satisfactorily as to leave little to be desired.

THE CASE OF EDWIN BARTLETT.

MERCURIALISM; DEATH FROM LIQUID CHLOROFORM; NECROPSY.

BY ALFRED LEACH.

(*Concluded from p. 970.*)

THE remaining peculiarities of the patient are grouped in the following account of my twenty-two days' observation. The general condition on Dec. 10th is given at the beginning of this article. In my notes of Dec. 12th to the 16th the following passage occurs: His physical symptoms rapidly improved; but his spirits did not. He said his gums pained him, and that he could not obtain any sleep whatever. Bromide, opium, and injections of morphia (seven minims thrice a day) were almost without effect; bromide of ammonium in one-scruple doses or more he repeatedly declared irritated him and made him restless. The bowels were acting regularly, and he was taking food. The dulness to percussion over the region of the abdomen suddenly shifted from the left iliac to the right lumbar region, and a swelling as large as a hand accompanied it, but disappeared in a day or two (phantom tumour?). On the 17th *et seq.* he suffered from "wind," and a mixture of carb. veg. c. confec. rosae found favour with him. When advised to go for a drive he declared it would kill him; he liked "to lie still and feel happy." His spirits were better, and he engaged in conversation. He began to talk about his return to business, his movements and plans for the future, but always a remote future; for the present he could not be persuaded to leave his bed. He had his stumps drawn with a view to having a set of false teeth made later on. He thought about his health unduly, exaggerated his alleged weakness, but did not expatiate on any special trouble or fix his mind on any individual organ or symptom. He could not be said to be anxious about his condition; he was contented to think it bad. He blandly inquired: "Can one be as bad as I and yet survive"? He adopted the inference with prophetic apathy. He emerged occasionally from his usual reserve, but still shyly, to bestow praise on absent persons, or, more timidly, on persons present. He expressed to his wife unbounded confidence in his doctor, and occasionally said he "knew the doctor would cure him." He was depressed by trifles, but never angered by anything. He was passive under treatment, and did what he was told, provided it involved no great effort. He would smile, but seldom laugh. When alone with his wife he was said to weep bitterly for more than an hour at a time, and said he did so "because he felt so happy." He said the world was very good to him. He gave one the impression of suffering from partial paralysis of the will and emotional ataxy. His wife remarked in his presence, "You would not think, seeing him now, that he rules a staff of *employés* kindly and considerately, but with unequalled firmness." By all accounts this was perfectly true. He was a sound man of business, "talented" one might say, very straightforward, and strictly honourable. Drawn into conversation on his hobby, he would brighten up amazingly, and afford interesting information on the laws of demand and supply, of imports and exports, down to the minutiæ of the grocery business. With him trade was a profession. On Dec. 18th he acknowledged that he was getting better, but he and his wife requested me to bring in a physician to witness the fact, giving as reasons that family disturbances and dislikes existed. The only reproachful word I ever heard him utter was on this occasion, when describing the part played by certain of his relatives. Asking for the consultation, he rose in his bed excitedly, saying, "I do this for the protection of my wife." On the 19th Dr. John Gardner Dudley visited him with me, and has kindly permitted me to transcribe and abridge portions of the notes he made on the occasion. "*Condition:* I found the patient lying in bed in an easy position and apparently free from discomfort. He had a depressed mental appearance, and looked at me through his eyelashes, his eyelids being half closed. He said he was quite free from pain, excepting that his gums were very uncomfortable from having had teeth extracted. He said he kept his bed because he preferred it to sitting up, and that he had been much overworked, mentally and bodily, and required rest and sleep. He also said he had not slept well for a considerable time, and scarcely at all the last few nights. I found his gums much inflamed and spongy; the edges were ragged. His tongue was large and flabby, and indented by the few teeth he had left, and was very slightly coated. His bowels were acting regularly; his urine was normal; his temperature normal; his pulse 80, and of moderate volume; chest and abdomen normal. I told him he was a sound man, and that he ought to sit up and go out daily for a walk or drive. We prescribed fifteen grains of hydrate of chloral, fifteen grains of bromide of ammonium, and twenty minims of solution of hydrochlorate of morphia, to be taken at bedtime, and repeated in four hours if necessary. Also a tonic mixture containing acid. nux vomica, and taraxacum, to be taken at 11 A.M. and 4 P.M. daily."

Dr. Dudley's notes also mention, among facts that struck him, the wife's solicitude and attention—a remark that has my fullest concurrence; a kinder, more tender, more patient, or more self-sacrificing nurse could not have been wished for. Beyond making a mental note of this fact when I began my attendance, I very naturally took little further notice of the Bartletts' bearing towards each other; but I distinctly remember at first receiving an impression that there was something unusual, something unfamiliar to one's everyday experience, in their behaviour one to the other—a freshness in their affections, if I may so express it, together with a reserve in their approaches. I jumped at the very inappropriate conclusion that they were newly-married people, and thought no more about it until I was informed of the non-existence of sexual relations between the parties. I was unprepared when in the witness-box to detail the several cogent reasons I have for accepting in the main this statement, and I am not at liberty to give them here; their suppression was and is of no moment, and many medical men have already, by drawing independent conclusions, accepted the statement as possibly true. I have grounds, too, for believing that the patient was not devoid of moderate sexual appetite, though its gratification was not permitted to conflict with his marriage compact. Specially examined after death, his genital organs were found normal. I protest strongly against the supposition, unwarranted by any evidence whatsoever, that the deceased was a victim to a degrading secret vice.

On Dec. 21st, when his teeth were extracted, a peculiar and suggestive circumstance occurred, which tends to throw some light on the man's character. He had a firm belief that he could not be brought under the influence of "laughing gas," because in former years medical men and dentists had failed to produce anæsthesia in him by its aid, and had told him he "could never be brought under." I resolved to avail myself of the peculiarly impressionable nature of the patient and his unreasoning belief in my powers; so, after preparing his mind by a discourse upon the voluntary abolition of painful sensations and a mystical manipulation of a camel's hair brush saturated with cocaine, I informed him that he could no longer experience any sense of pain in his lower jaw. I placed him in position, signalled to the dental

surgeon to commence operations, and treated the patient to a clinic somewhat in this style: "Now, what you feel is merely a sense of chill from contact with a metal and absolutely painless. Lie still and keep the mouth open. Now you feel the teeth painlessly dropping out from the insensible sockets, and it does not hurt you in the least. The sensation is almost pleasurable." The four lower incisors had flown out, and the patient had kept his eyes inquiringly fixed and never winced. He was puzzled to say whether he had suffered or not. Ordinarily he could not bear to have his gums or teeth touched by his own or other person's finger. I have never practised this pious fraud before, and am doubtful whether I shall ever meet with another case in which it will bear repetition. Ten days later, when his left lower canine required removal, I was lacking in faith enough to resort to it. I could not cajole him into a resolution to go out of doors, but he managed to get out of bed and totter about the room. His wife on several occasions told me before him, "He still talks about dying and not recovering." He would not explain his reasons. She also said that he slept a good deal better than he thought he did. He consented to go to Torquay, but postponed his departure *sine die*. He and his wife both protested against a diminution of professional visits, declaring that he "derived strength" from them and felt weak in the intervals. I was desirous of removing him from both his wife and myself, but he persisted that strangers would not understand his complaint. He would not have a nurse. His wife still sat up all night, or took short sleeps on the sofa or in the arm-chair by his bed, and, when remonstrated with, she declared in his presence that he would not compose himself or rest unless she sat by holding his foot, and when she was absent from her post he would leave his bed and wander. By day he showed no such inclination. He was now obtaining some sleep, had lost no flesh, his muscles were firm, and his countenance more cheerful. One morning he told me that, being unable to sleep and feeling exhausted, he had risen from his bed and stood for two hours with his arms outstretched over his sleeping wife, and "felt her vital energy entering his finger tips," after which he slept. His urine at this time was slightly acid, sp. gr. 1010, otherwise normal. On the 23rd he was much perturbed from having passed the lumbricoid worm. On the 26th he confided to us his belief that he was mesmerised, and that he and his wife were alike victims to the mesmeric influence of a friend whose acquaintance they made some months previously. The only explanation he would afford as to the symptoms was that he was doing such strange things—things contrary to wont, usage, and common sense—things he would not do unless he were under mesmeric influence. I have not the slightest doubt he meant the peculiarly Platonic arrangements he had made as to his wife's future. Was this about mesmerism a delusion? I think not; I regard it as a hysterical attempt to render some extenuating account to himself for the absurd folly of his own proceedings. I was able a day or two later to successfully argue him out of his mesmeric theory. I believe no argument reaches an insane delusion. On the 28th I took him by surprise and insisted upon his going a drive with me while I went my rounds. It was genuine alarm and misgiving he showed as, muffled up from head to foot, he was assisted downstairs by two people. On his return he ran upstairs quite lightly, and the next day went a drive with his wife. On the 30th I did not visit him. On the 31st he had a tooth out under gas. On his return home he ate a good supper, ordered an extra allowance of breakfast for the next morning, and soon after midnight died from swallowing chloroform. His wife fell asleep about midnight in her usual place, holding his foot, and on awaking was struck, but not alarmed, by the peculiarity of his breathing. She awoke again about 3 A.M. or later with a cramp in the arm holding his foot; and, seeing his face buried in the pillow, she proceeded to place him more comfortably, but found him apparently dead. She tried to revive him, applying brandy, &c. On arrival at 4.30 A.M., Jan. 1st, 1886, I found the corpse lying on its back, forearms and hands on the abdomen, legs semi-flexed and everted, the parts of the thorax lying uppermost quite cold, the hottest parts of the back being below 95° F; eyelids partly closed, pupils half dilated; tongue very white; no smell whatever in the mouth, and no froth; rigor mortis absent. Dead about three hours (?). There was no trace of any struggle, and no poison in the vicinity of the corpse (a very careful search for the latter was made). Cause of death unknown. I have subsequently discovered by experiments that liquid chloroform whitens the epithelium of a furred tongue, especially a "smoker's tongue," while its rubifacient effects are alone discernible in a glazed or clean tongue. In the corpse and in the living body the white appearance is lost in five or six hours.

The necropsy was performed on Jan. 2nd at 2.30 P.M., about thirty-eight hours after death, by Dr. T. H. Green (from whose notes I am kindly permitted to quote), assisted by Dr. H. M. Murray. Present: Dr. J. G. Dudley, Mr. W. W. Cheyne, F.R.C.S., and myself. Body well nourished; on the abdomen much cutaneous fat of deep-yellow colour. Rigor mortis present. Heart: On opening the pericardium nothing abnormal; heart, on removal, normal in size; muscular tissue a little flabby, probably from post-mortem causes; valves healthy; tiny patch of atheroma at root of aorta; the post-mortem staining of the lining membranes of the cavities and large vessels abnormally deep; blood in cavities dark and quite fluid. Lungs and pleuræ normal. Liver, spleen, kidneys, mouth, pharynx, trachea, and upper part of œsophagus normal. Œsophagus at its lower part abnormally vascular and irregularly denuded of its epithelium. Stomach: Nearly an ounce of contents, consisting of a brownish grumous liquid, varying in consistence; the more solid portions are paler in colour, and look something like thick mucus; smell strong, pungent, ethereal odour, resembling a combination of chloroform and garlic. At the cardiac end of the stomach the mucous membrane is of a dusky pink colour, which, to the naked eye, looks uniform, but under a lens there is a distinct punctiform and capillary hyperæmia; the surface is covered with an abnormal amount of thick tenacious mucus or lymph; at what appears the most dependent part there is a patch about the size of a five-shilling piece, where the mucous membrane presents a rough irregular appearance, as though it were partly destroyed; here the membrane is more easily removed by the finger-nail than elsewhere. In other parts of the cardiac end the mucous membrane is not easily removable. The pyloric end of the stomach is of a pale-greenish colour, covered with a tenacious mucus, but otherwise normal. Intestines: The contents present the same peculiar odour in a less marked degree and less pungent. Some small pieces of what appears to be mango chutney were found in the whole length of the intestines, and one or two pieces were observed in the stomach. The mucous membrane is normal. The large intestine contains much fæcal matter. Head: On removing the calvaria, the dura mater was found abnormally adherent. With exception of rather more post-mortem staining than usual, the surface of the brain presents nothing abnormal. A careful examination of the brain throughout failed to reveal anything abnormal.

On Jan. 6th I excised the lower jaw, the tongue, and surrounding parts (subcutaneously), and made a section of the incisor region. The edges of the vacant sockets were blackened to the depth of one-sixth of an inch; the rest was healthy. The alveoli contained decomposing matter. Dr. T. Stevenson, the Government analyst, found 11½ grs. of pure chloroform and a trace of alcohol in the contents of the stomach. A considerable evaporation had taken place before these reached him. He found unimportant minute traces of lead and copper in the substance of the lower jaw. The stomach, jaw, and tongue were the only parts sent for analysis.

The general opinion seemed to be that the patient had met with his death by about an ounce, or probably less, of chloroform finding its way into the stomach. The unsolved problem is, Did he take it as a soporific, an anodyne, or as an instrument of suicide? Did he, acting upon impulse, take it with no well-defined purpose whatever, or did he (and I have a leaning to this view) take it in sheer mischief with the intention of alarming by his symptoms the wife who an hour or two previously had talked about using it in an emergency? The problem in diagnosis is: What was he suffering from: melancholia, hypochrondriasis, or hysteria—one or more of them? The loss of flesh, the aversion to food, the urine loaded with urates, the inactive skin and liver, the obstinately inactive bowels, the overwhelming and persistent gloom of melancholia, were absent in this patient, who "liked to lie still and feel happy." On the other hand, we miss the eagerness of the patient to describe his ills, the anxiety to interpret special symptoms, the desire for recovery, the greed for medical literature, and the inevitable bundle of former prescriptions that stamp the hypochondriac. But what symptom of hysteria is absent?

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

TOOTH-PLATE IMPACTED IN THE ŒSOPHAGUS; SUCCESSFUL REMOVAL BY ŒSOPHAGOTOMY; REMARKS.

(Under the care of Sir WILLIAM MAC CORMAC.)

IT is now generally conceded that the treatment of foreign bodies impacted in the œsophagus, where unsuccessful attempts have been made by the use of forceps &c. to extract them, should be by an operation—œsophagotomy,—as in the following case. Here, as will be seen from the diagram illustrating the case, the plate with very irregular and pointed projections had become fixed, and resisted all attempts to remove it. The operation has been a very successful one when undertaken before the advent of inflammation or suppuration about the œsophagus; the chief danger appears to be in delay. The point in the treatment to which Sir William draws attention in his remarks (the closure of the œsophageal wound by suture) is one which will probably be generally adopted in similar cases, as it presents considerable advantages. The notes of the case have been taken by Mr. Cameron Kidd, house-surgeon.

The subject of this accident was a woman, aged thirty-one, of healthy appearance, but subject to epileptic fits since childhood. During one of these fits, which took place on Sunday morning, March 14th, the patient swallowed a set of artificial teeth, consisting of a silver plate to which five teeth (four incisors and one premolar) had originally been attached, but one of these (the premolar) had been

Tooth-plate impacted in the œsophagus.

broken off some time before the accident occurred. (See engraving.) When the patient regained consciousness she had some difficulty in breathing and swallowing, and then discovered what had happened. She immediately consulted a doctor, who gave her an emetic, which caused her to vomit without moving the plate, and an attempt to extract them with forceps was made without success. She was then advised to apply at St. Thomas's.

On her arrival at the hospital two hours after the fit, there was no difficulty in breathing, but there was considerable pain on drinking. An œsophageal bougie, carefully passed to ascertain the position of the foreign body, became arrested at a point six inches and a half from the edge of the teeth. The patient said she could feel the tooth-plate from the pain it caused, which she referred to a spot an inch below the cricoid cartilage. Mr. Battle made repeated and prolonged efforts to extract the foreign body by means of œsophageal forceps of various kinds. The plate was repeatedly grasped by the forceps, and as much force used as was thought justifiable, but all attempts to disengage it failed. Some slight hæmorrhage followed. During one attempt half a tooth was broken off and was extracted. The plate was evidently flattened against the posterior wall, as the forceps went past it, and it could only be grasped when they were withdrawn a short distance and passed again with the blades open. The patient, who was admitted on March 14th, was seen by Sir William Mac Cormac at 7 P.M., but as there was no dyspnœa or other urgent symptom, it was decided to postpone any further action until the following day.

March 15th.—The respiration is quite easy, but the patient cannot swallow anything, even a small quantity of liquid, and she expectorates the saliva. She complains of severe pain just below the cricoid cartilage, and at the back of her neck. There is some cough.

Operation.—As every possible effort had been made to extract the body by the mouth without success, further attempts in this direction seemed unadvisable. The plate was of very irregular form, with sharp angular projections at each side. It was evidently very firmly lodged in the tube, and was not likely to be extracted without danger of tearing the œsophagus, entailing very serious risk. Sir William therefore decided to perform œsophagotomy, the position of the foreign body being distinctly made out by the bougie and forceps, although nothing could be felt in the neck externally. At 2 P.M., the patient being under the influence of chloroform, the œsophageal forceps was passed and the foreign body again plainly felt at the same point as before. An incision about four inches long was therefore made along the anterior border of the left sterno-mastoid muscle, extending downwards to within half an inch of the sternal notch. The superficial tissues were divided until the edge of the sterno-mastoid muscle was reached, and the edges of the wound retracted. The anterior jugular vein, which was somewhat larger than usual, gave some trouble at this point, but was finally drawn inwards with the thyroid body. Several veins required division after the application of a double ligature. The carotid sheath was exposed, the omo-hyoid muscle cut through, and the artery and vein drawn outwards by the finger of an assistant. After dividing about half of the sterno-hyoid muscle and drawing the thyroid body well over towards the middle line, the œsophagus was exposed, but even then the foreign body could not be felt through its walls. It was feared it might have passed into the stomach. The forceps were again passed through the mouth, but even with them the foreign body was not distinctly felt. As, however, the probabilities were strongly in favour of it not having shifted from the position it occupied before the operation, a longitudinal incision about three-quarters of an inch long was made upon the end of the forceps, and when the lips of the incision were held apart the plate was at once seen closely impacted against the posterior wall of the œsophagus. It was readily seized with a pair of forceps and extracted without difficulty. It was now decided to close the œsophageal wound. An ivory-balled probang was passed to cause the tube to project somewhat, and the edges of the incision were united with three catgut sutures. The external wound was disinfected with a 1 in 1000 perchloride of mercury solution. Two drainage-tubes were inserted, and the margins of the skin united with silk sutures. There was very little bleeding throughout the operation. The wound was dressed with iodoform, salicylic wool, and gauze bandages. The patient was ordered to be fed by the rectum, and not to have anything by the mouth.

March 16th.—On the wound being dressed this morning, it looked well and there was no puffiness. Patient had a nutrient enema at 12 A.M., and a similar one has been ordered every four hours. She has taken nothing by the mouth, and expectorates her saliva. Slept well; no pain. The temperature rose after the operation to 101°, and is now (9 A.M.) 100·4°; at 9 P.M. it was 98·4°.

18th.—The stitches were taken out and the drainage-tube removed. The wound was looking very well. The patient could now swallow her saliva and she was allowed a little milk, which she swallowed easily and without any pain. Nutrient enemata discontinued. Temperature A.M. 99·4°; P.M. 100°. There has been no regurgitation through the wound.

20th.—Last evening some milk came through the wound after drinking. The patient did not mention the fact till this morning, as she was afraid her supply of milk would be stopped. She is a restless, irritable woman, and dislikes the feeling of thirst. On taking off the dressings and giving the patient milk to drink, some came out of the lower end of the wound, which was perfectly free from inflammation and had healed, except at the spot above and below where the drainage-tubes had been placed. The nutrient enemata were ordered as before and the supply by the mouth stopped. Antiseptic dressings left off. Temperature normal.

22nd.—Wound again dressed; it was looking quite well. On drinking hastily, a little milk came out from the lower

end of the wound; a small drainage-tube was inserted there. The patient was still allowed to drink milk. The nutrient enemata were discontinued. Temperature, morning, 99°; evening, 99°. General condition excellent.

25th.—The wound is now soundly healed, with the exception of a small place at the lower extremity. No milk has passed through it for the past twelve hours, not even when the patient swallows quickly. Drainage-tube removed.

27th.—Wound completely healed. The patient had an epileptic fit at 4 o'clock this morning.

30th.—The patient was up on the 28th, and went home to-day. There is a linear cicatrix in the neck, scarcely noticeable. She can swallow as well as before, and without pain or inconvenience, even when taking solid food.

The patient was seen about a month later, and was in excellent health. She had been supplied with a new and securely fitting plate.

Remarks by Sir WILLIAM MAC CORMAC.—This patient was only sixteen days in hospital, having made a rapid recovery. The point of chief interest is the closure of the œsophageal incision directly after the removal of the plate. The introduction of the sutures was a little troublesome owing to the depth of the wound, and I consider the partial failure was due to imperfect closure of the incision, from an insufficient number having been passed. Had four or five sutures been introduced in place of three, this accident might probably have been avoided. The milk, however, only found its way into the wound on the sixth day, when the chance of extravasation into the cellular tissues of the neck would be past, and it soon ceased to escape. This practice appears preferable to introducing a tube into the stomach from the neck or mouth and allowing the wound to heal by granulation—at all events in cases such as this one, where there were no inflammatory changes in the parts, and the margins of the œsophageal wound were clean cut, and not bruised.

EUROPEAN GENERAL HOSPITAL, ADEN.

A CASE OF MULTIPLE ABSCESS OF THE LIVER; DEATH; NECROPSY; REMARKS.

(Under the care of Surgeon-Major COLSON.)

THE notes of the following case are by Assistant Apothecary Gardiner.

The patient, J. B——, a seaman, was admitted on March 2nd, complaining of severe pains in the right side. He stated that he was quite well before leaving Bombay (about Feb. 22nd), and was taken ill two days after sailing. He was quite emaciated and exhausted, skin and conjunctivæ yellow, tongue rough and dry. The temperature on admission was 102·8°. There was a good deal of bulging over the hepatic region, with pain and tenderness on pressure. On careful examination the liver was found very much enlarged, with a sense of fluctuation below the ribs. An abscess was diagnosed pointing anteriorly about half an inch below the ribs.

March 3rd.—The patient was placed under chloroform, and an exploring-needle introduced, pus being found. A puncture was made with a trocar, and about eight ounces of pus removed through the cannula. The cannula was retained in the abscess as a means of drainage. Antiseptic dressing was then applied. He was ordered milk, mutton broth, and stimulants.—Evening: Temperature 102·8°. Felt much easier. One drachm of solution of hydrochlorate of morphia to be given at bedtime.

4th.—Temperature 99·4°. Bowels moved twice yesterday. Says he feel comfortable and slept fairly last night. Three grains of quinine given twice. To continue stimulants, &c. Evening: Temperature 101°. Cannula removed and drainage-tube substituted. Morphia draught to be repeated.

5th.—Temperature 99·6°. He slept well last night and feels less pain in the side. Bowels moved three times; light-coloured and semi-solid. Respiration before and since operation has been very slow, numbering between 8 and 12 per minute. Five grains of quinine were given twice during the day.—Evening: Temperature 101·4°. The morphia draught repeated.

6th.—Temperature 97·8°. The bowels were not moved during the night. Slept nearly the whole night, and is inclined to be drowsy this morning. Pulse 88; respiration 14. Evening: Temperature 103°; pulse 112; respiration 30. Appears worse. Had three motions during the day, and is very much depressed. Five grains of quinine to be given at once and the morphia draught at bedtime.

7th.—Bowels moved twice last night, the second motion containing blood and pus. Temperature 99·6°; pulse 104; respiration 22. Five grains of quinine given twice.—Evening: Had three motions during the day, each one containing pus. Temperature 103°; pulse 110; respiration 26. Is very low. To continue support by stimulants, &c.

8th.—Temperature 100·4°; pulse 124; respiration 38. Had two motions last night of the same character as the previous ones. Complains of great weakness.—Evening: Had about ten motions during the day, containing large quantities of pus; some passed involuntarily in bed. Temperature 102°; pulse intermittent and thready; respiration short and hurried. Is in a very low state. He gradually got worse, and died from exhaustion at 1 A.M. on the 9th.

Necropsy.—Liver enormously enlarged, extending upwards on the right side to the level of the fourth rib downwards three inches below the ribs. The left lobe occupied the whole of the left side, extending upwards to the fifth rib and downwards to about two inches below the level of the ribs. Heart and lungs displaced upwards. The cavity of the abscess which had been punctured by the trocar was found well contracted, but posteriorly in the right lobe there were two large abscesses not communicating with one another or the first, and filled with pus; one of these opened into the ascending colon. The liver was not adherent to the abdominal parietes, but no pus had escaped between. The liver weighed 6 lb. 12 oz.

Remarks by Surgeon-Major COLSON.—The non-subsidence of the symptoms after the abscess had been freely opened pointed to another collection of pus. I had fully determined, after an interval of a day or two, to explore for this. The appearance of pus in the stools showed it had opened into the bowel, and I had hopes that the unfavourable symptoms would subside. The result of the post-mortem examination showed that any treatment in this case was hopeless. The previous history of the case is very unsatisfactory. The patient was a German, and talked and understood English imperfectly.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Encysted and Infantile Hernia.—Imbecility with Choreoid Movements.—Treatment of Stricture of Urethra by Electrolysis.

AN ordinary meeting of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair.

Mr. LOCKWOOD contributed a paper on the Morbid Anatomy and Pathology of Encysted and Infantile Hernia. After commenting upon the practical importance of the subject and briefly referring to its history, the writings of Hey and Cooper and other authorities were quoted. It was shown that the origin of encysted hernia was usually attributed to the stretching of a cicatricial membrane which was supposed to obstruct the upper end of the patent processus vaginalis. This view was rejected because—1. Such a septum had never been seen and its existence was doubtful. 2. The specimens in the museums afforded no indication that cicatricial tissue had entered into their composition. 3. Because the sac of these herniæ was always composed of two layers of peritoneum. 4. Because an examination of the tunica vaginalis showed that it either communicated, in cases of encysted hernia, with the peritoneal cavity, or was simply closed by apposition and adhesion of the walls. Upon these and other grounds it was concluded that the various herniæ called encysted belong, in reality, to the infantile variety. Infantile hernia were believed to be originated by some event connected with the transition of the testicle, which was described. It was stated that the processus vaginalis preceded the testicle, and that it was drawn along by fibres of the gubernaculum which were inserted into it. The usual account of that muscle was mentioned, but additional bands of it were described attached to the external sphincter of the anus and tuber ischii; and others were mentioned ascending the back of the processus vaginalis, with the spermatic vessels, to the peritoneum. These fibres were identified in the spermatic cord as the "internal cremaster," and after describing the

looseness of the peritoneum of the back of the abdomen, the way in which it accompanied the transition of the testicle was explained. A band of muscular fibres which passed from the epididymis to the inner sac wall of the infantile herniæ was next described and identified as the upward prolongation of the gubernaculum. These fibres were considered to have much to do with the origin of the hernial sac. The results of the inquiry were: (*a*) That the London museums contain no specimens of encysted hernia such as was usually described. (*b*) That the various specimens designated by that name belong to the infantile variety. (*c*) That the latter owe their origin to the tractive power of the gubernaculum testis.—Drawings of specimens from the museums of St. Bartholomew's, Guy's, St. Mary's, and St. Thomas's Hospitals, as well as various diagrams, were exhibited.—Mr. HOWARD MARSH was not prepared to endorse in their entirety the views put forward by Mr. Lockwood, but so far as he could gather from the paper the arguments seemed sound. He confessed that he had always had some difficulty in understanding how encysted herniæ originated, notwithstanding Mr. Hey's original account of the nature of the hernia.—Mr. LOCKWOOD, in reply, thanked the curators of the various museums who had allowed him to make such free use of the specimens under their charge.

Dr. FLETCHER BEACH read a case of Imbecility with Choreoid Movements. The author recorded the case of an imbecile patient, of fairly high type, aged seventeen years, who, as the result of epileptic fits, lost some power on the left side, and after which continuous spasm of the left hand and arm was noticed. A description of the movements, which ceased shortly before death, was given. At the necropsy the parietal regions of the brain were more resistant than normal, and the occipital convolutions were firm and hard; the white matter of the first temporo-sphenoidal convolution, of the inferior parietal lobule on both sides, and of the occipital convolutions, on a level with the middle part of the lateral ventricles, appeared fibrous. The chief changes noticed microscopically were: (1) great increase in the number of the vessels; (2) distension of many of these vessels; (3) extensive infiltration of the tissue with leucocytes, especially in the perivascular sheaths of the vessels. The case was regarded as one of post-hemiplegic disorder of movement allied to those described by Dr. Gowers (Medical and Chirurgical Transactions, 1876). The difference between the symptoms noticed in athetosis and in the disease under consideration were contrasted; the essential difference being that, according to Dr. Gowers, in the mobile spasm seen in partially paralysed limbs there was a fixed spasm superadded to the mobile spasm. The pathology of the affection was then discussed. Dr. Gowers says: "The symptoms point clearly to damage to the grey matter of the brain, to local perverted nutrition of nerve cells, in consequence of which they over-act, either spontaneously or on the stimulus of a volitional impulse, which is by their over-action perverted or irregularly distributed." In the case under notice great congestion of the grey matter of the brain was present, and it was held by the author that the microscopical appearances were pathological. The theory that the nerve cells in this case have over-acted from perverted nutrition, due to excessive supply of blood, and hence the spasms, was brought forward. Mention was made of the fact that similar appearances have been noticed in the medulla from a case of hydrophobia, and to a less degree in the spinal cord from a case of tetanus.

Dr. STEAVENSON and Mr. BRUCE CLARKE contributed a paper on the Treatment of Stricture of the Urethra by Electrolysis. The more extensive use made of electrolysis in surgery and gynæcology abroad, and especially its successful employment in the treatment of stricture of the urethra, induced the authors to undertake a series of observations to test the accuracy of the reports which had reached this country. Their results bore out in every particular the successful results received from America. Electricity, on account of its power of splitting up compounds into their chemical elements, can be used as a substitute for ordinary caustics to the human body. It can be applied with especial advantage to parts difficult of access, such as the male urethra and the uterine cervical canal, and it can also be applied to these and other regions where the application of other caustics is attended with a certain amount of danger. Its effects could be limited to the points touched by the electrode. The caustic effect could be arrested or not commenced until the applicator, in the form of the electrode, was *in situ*, and the duration and extent of the caustic action was entirely under the control of the will of the operator. The treatment of stricture of the urethra by this method was the most simple and perhaps the most striking in its results, and had therefore been selected as the first on which to collect and report observations. In this paper the details were given of six cases of stricture of the urethra treated by electrolysis, the *modus operandi* was explained, the steps of the operation were given, and the advantages of this method of procedure were thus summed up: There was usually no bleeding. If hæmorrhage did occur, it was accidental, and usually showed that too strong a current had been used. No anæsthetic was required. If pain or discomfort was produced, it was trifling. The patient could, in the case of slight strictures, pursue his ordinary occupation during the period of treatment. No antiseptics were required, as the process itself was aseptic. In the majority of cases there was no contraction or return of the stricture. Eschars produced by caustic alkalies were said to heal with less contraction than wounds produced in any other way, and electrolysis with the negative pole of a battery was a means of applying the same destructive action as was caused by the caustic alkalies to parts difficult of access in a way which was impossible by any other method. Probably other chemical decompositions and combinations take place at the negative pole besides those characteristic of the caustic alkalies, but they have not up to the present time been thoroughly made out.—Mr. BERKELEY HILL said that, whilst congratulating the authors on their interesting paper, he could not accept their conclusions as quite satisfactory. Like the American cases, the cases were given in too little detail as to the existence, size, and nature of the stricture; moreover, the final results had not been yet observed. In the first case, in which the stricture had lasted twenty years, he must say that the facts related did not carry much conviction to him; there was no conclusive proof that the tissue of the stricture had been absorbed. There were many urethral impediments that were not strictures. He related a case in which there was a stricture two inches and a half from the meatus urinarius. This consisted of a nodule of cicatricial tissue on one side of the urethral wall. By means of the endoscope (which the authors did not appear to have used), it was possible to watch the action of the electricity. In his own case the point of the needle entered into the nodule and bubbles of gas made their appearance; there was no pain, except on making or breaking the current of electricity. The application was made for fifteen minutes, with the result that an increase of one millimetre in the diameter of the urethra was gained, but even this was not maintained; and after subsequent applications the stricture became more and more narrow, and had to be treated by other methods. Altogether, he felt sceptical as to the real result of this method of electrolysis.—Mr. SWINFORD EDWARDS detailed the particulars of a case of stricture which had been first under his care two years and a half ago. There were two strictures in the penile portion of the urethra, and one in the subpubic region. The deepest stricture allowed a No. 12 French to pass, and by the gradual interrupted method a No. 25 was reached when the patient left off treatment. He returned six months ago with three strictures, situated respectively half an inch, four inches, and five inches and a half from the meatus. This time he was only able to get a filiform—No. 4 of the French scale — through the deepest stricture. A No. 3 electrode was held against the deep stricture, and a current of from five to eight milliampères was employed, but there seemed to be no effect. At another sitting a No. 5 electrode was tried, and this time with apparently excellent results, so that a No. 22 steel and 24 pewter catheter could be passed after a month or so. He opined that electrolysis might prove of great value, especially for those strictures which could not be treated by Otis's dilating urethrotome, or indeed by any other reliable method.—Mr. BUCKSTON BROWNE spoke of the necessity for careful examination of urethræ and for bearing in mind the sources of fallacy. He felt quite certain that several of the cases related would not have needed internal urethrotomy, and could have been successfully treated by gradual interrupted dilatation. He remarked on the circumstance that the succeeding electrodes were larger and larger, and said that mere pressure against the face of the stricture led to temporary relaxation and a flow of urine, even though the instrument had not engaged the stricture. It was a very remarkable fact about Dr. Newman's cases

that they were all successful.—Dr. STEAVENSON, in reply, said that the electrodes used by him were entirely different from that shown by Mr. Berkeley Hill; he would expect some swelling and increased narrowing of the urethral passage after the use of such a needle. It was necessary that the electrodes should be held tightly by the stricture, and hence the use of larger and larger sized instruments.—Mr. BRUCE CLARKE in, reply, said that he was well aware of the objections that could be raised: that the urethræ were not really strictured and the cases not really cured. Some of the cases narrated certainly demanded something more than the ordinary kind of treatment, though others did not. In one of the cases eight months had elapsed since the operation, and a bullet-headed instrument passed with ease. The result was as good as that obtained by any cutting operation, but he would be loth to assert that the case had been cured until some years had elapsed. He hoped to have an opportunity of reporting the ultimate result to the Society.

HARVEIAN SOCIETY.

AT the meeting held on May 6th (Mr. Malcolm Morris, Vice-President, in the chair) the following papers were read:—

Sudden Death in Pregnancy, Parturition, and the Puerperal State.—Dr. M. HANDFIELD JONES briefly traced the history of the evidence on which hypertrophy of the left ventricle in pregnancy rests, and raised the question whether this hypertrophy was ever wanting, and if so what were the results. Cases were detailed in which clinical investigation showed apparently absence of all hypertrophy, and in such patients signs of cardiac failure and insufficiency were observable; the possibility of repeated miscarriage being also referred to this cause was shortly touched upon. Attention was drawn to the close tie existing between the heart and the uterus, and the extreme probability that the return of the heart to its normal size after delivery was, as in the case of the womb, due to a gradual process of fatty metamorphosis. While under healthy conditions this process was devoid of danger, arguments were adduced to show that in some patients this process of fatty change might overstep the normal boundary, and by weakening the cardiac muscle leave the heart liable to be overwhelmed by secondary conditions insufficient in themselves to bring about a fatal issue. Cases were read in support of this view. In conclusion, some of the cases quoted in the literature of sudden death in and after pregnancy were brought forward, and the explanation given of death in the various cases criticised, with the purpose of showing that in most of these the fatal result could be more scientifically accounted for under the view already enunciated than by referring them to such obscure conditions as idiopathic asphyxia, &c.—Dr. JOHN PHILLIPS mentioned a case in which albuminuria and œdema had been present, but no hypertrophy of heart or evidence of actual renal inflammation. Premature labour had therefore not been induced. Was it always advisable to induce it where there was reason to suspect fatty degeneration during the later months of pregnancy?—Dr. CHAMPNEYS thought that the changes in the vascular conditions before and after pregnancy were not yet fully understood. Cases of true cardiac insufficiency from rheumatism were often unsuspected until pregnancy occurred. In 75 per cent. of the cases recorded by Dr. Angel Money there were murmurs of some kind, but mostly transient. Fainting and sudden death were liable to occur even without hæmorrhage, and for this reason especial care was necessary for many hours after delivery when there had been much loss of blood.—Mr. GEORGE EASTES referred to clotting of blood in the pelvic veins and pulmonary embolism, and to ruptured uterus and post-partum syncope, as other causes of sudden death.—Dr. MORTON believed that the alteration in the character of the blood had much to do with the formation of the clots referred to by Mr. Eastes.—Dr. M. HANDFIELD JONES, in reply, advocated induction of premature labour in the cases referred to by Dr. Phillips. He was not aware of the average duration of the physiological hypertrophy after delivery.

Some Practical Points in Percussion and Auscultation of the Chest.—Dr. WILLIAM EWART read a paper on this subject, prefaced by a brief description of the instruments used in percussion and in auscultation. Manual percussion, in the author's opinion, was to be preferred to the use of the hammer and pleximeter. The relative advantages of monaural and of binaural auscultation were discussed from a practical standpoint. Differential stethoscopy was thought to be of little value, but Dr. Ewart advocated the use of the "comparing stethoscope," an instrument differing from the ordinary binaural in possessing two chest-pieces connected with the ear-tubes by means of a four-way tube shaped like the letter **X**. By this instrument special facilities were afforded for the rapid examination of the chest, and for the accurate comparison of sounds heard at widely distant spots. The comparing stethoscope had been constructed by the author before he had become acquainted with Dr. Spencer's stethoscope. The priority of the latter was freely acknowledged, and a tribute was paid to its ingenious and elegant construction. The paper concluded with practical suggestions as to the methods of auscultation and of percussion, and as to the management of patients under examination.—Dr. SANSOM advocated the use of the pleximeter in percussion. He regarded the finger as the medium least of all adapted for the purpose, believing that it was nearly impossible to obtain precise outlines by its means. For his own use he had devised a pleximeter consisting of a small pillar of vulcanite furnished with flat plates at each end of different size, adaptable to broader or narrower intercostal spaces or other surfaces. By percussion with the finger the sense of tactile vibration was fully preserved, and outlines could be so clearly defined as to admit of being marked out in pencil on the chest itself.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Bacteriology.

A MOST successful meeting of the above Society was held on Friday last at the West London Hospital, at which Mr. Ballance gave a demonstration in Bacteriology. The whole of the out-patient department was utilised for the occasion, and was tastefully decorated with flowers and ferns. Upwards of sixty microscopes were arranged upon the tables for the purpose of showing the many varieties of micro-organisms which have been during recent years isolated and described. Some beautiful specimens of the bacillus anthracis were shown by Dr. Acland. In addition to the specimens, the various apparatus employed in bacteriological research were exhibited respectively by Messrs. J. Allen and Son, of Marylebone-lane, and Messrs. F. E. Becker and Co. But the chief interest was centred in the large series of cultivation specimens which Mr. Ballance had specially prepared for the meeting. Before the members dispersed, a cordial vote of thanks to this gentleman, proposed by the President, Mr. Hemming, and seconded by Dr. Thudichum, was carried unanimously; and, in reply, Mr. Ballance said that the marvellous advance which had recently been made in the subject of bacteriology had raised it unquestionably to the position of a science, which it was only true to say was almost daily increasing in importance, so much so that we were probably within a measurable distance of the time when each medical school would possess a bacteriological laboratory, in which instruction would be given to meet the requirements of an extension of the curriculum in this direction.

Reviews and Notices of Books.

The Science and Practice of Surgery. By FREDERICK JAMES GANT, F.R.C.S., Senior Surgeon to the Royal Free Hospital, late President of the Medical Society of London, &c. Third Edition, revised and much enlarged throughout, with 1090 Illustrations on Wood, mostly new and original. London: Baillière, Tindall, and Cox. 1886.

IT is now some years since Mr. Gant first presented to the profession his "Science and Practice of Surgery." Its distinguishing features, its method and style, are well known, and the reviewer of a third edition need not attempt to indicate them. Indeed, when a text-book has reached a third edition, and especially when it has had to compete with no mean rivals, the task of a reviewer is reduced to small proportions. The entire work has been revised for this edition, and a not unsuccessful attempt has been made to present to the reader the modern aspect of surgery. The mere fact of novelty has not been held sufficient to justify notice, and Mr. Gant has endeavoured to sift the wheat from the chaff, and to

incorporate in his work only what he believes to be real and substantial advances in surgical knowledge. In doing so he has of course laid himself open to criticism, for there is by no means a general agreement as to what is and what is not true progress. A new feature in this edition is a chapter on Bacteria in Surgery, contributed by Mr. Watson Cheyne. No one better could have been selected to write this chapter, and it forms a very valuable feature of the work. Indeed, we believe that nowhere else is such a practical, compendious, and useful account of this branch of pathology to be met with in the English language. The article on Diseases of the Skin is from the pen of Mr. Malcolm Morris; it bears all the evidences of careful preparation, and a thorough knowledge, not only of the subject, but of the requirements of the student. Other articles on special subjects are supplied by the same writers as contributed to the previous edition.

In turning over the pages of this work we have noted a few points in which we think it might bear improvement. Thus, for instance, on page 148, vol. i., an elaborate classification of tumours is given, in which we find melanotic tumours classed under cancers, and *not* under sarcomata; this is a mistake which would not be lightly passed over in any surgical examination conducted with any pretensions to efficiency; it is therefore a pity that it has not been corrected. There is some confusion also about the relations of sarcomata with recurrent fibroid tumours; in the classification just mentioned they are kept quite apart, but within twenty pages we find them all massed together as sarcomata. This is just one of those points on which a student needs precise and emphatic information, and he looks to his text-book to clear up ambiguous statements carelessly made, or those he meets with in older books. A similar confusion is introduced into the chapter on Diseases of Bone, in which we find a description of several varieties of cancer of bone. A brief mention is made of the fact that cancer "generally occurs in bone as a secondary formation," but the reader of the whole section would be likely to derive the impression that cancer of bone as a primary growth is well known, by no means rare, and is a disease demanding active surgical treatment. Nothing is written which even suggests that primary cancer of bone is either infinitely rare or entirely unknown. In another place we read that syphilitic sarcocele "cannot be distinguished from scrofulous." We are quite willing to admit that in some cases the distinctions between the different sarcoceles are not well marked, but the above is much too sweeping a statement.

There are passages in the chapter on Fractures which call for some remark. Here is one: "Fractures differ essentially in regard to the mode of their reparation, according as they are" simple or compound. By the way, why does Mr. Gant always speak of "reparation" and not of repair? But apart from this, we have here a statement which is seriously at variance with fact, and which is rendered more puzzling by subsequent statements. Thus, under the heading "Course and Termination" of Compound Fractures we read: "*Inflammation* supervenes, followed by suppuration, perhaps profuse, and partial sloughing; or by gangrene on a larger scale. Either degree of mortification, arising from inflammation, is limited to the seat of injury. By this process, however, a fracture, which originally was simple, may become compound in some cases." What idea this could convey to a student seeking here his first instruction on this subject we cannot conjecture. Such ambiguity not only renders the task of reading far less pleasant than it otherwise would be, but it produces a condition of bewilderment in the reader which is far removed from instruction.

Charcot's Joint Disease is not adequately described; its sudden onset with great swelling and its painless character are not mentioned. With regard to the mode of origin of loose cartilages in joints, we find in one paragraph these two statements, which scarcely harmonise:—"They seem to *arise* from the vascular processes of the synovial membrane, as outgrowths of that membrane, projecting into the joint." "Rarely, they form in the synovial tufts." In the description of Congenital Sebaceous Cysts of the Head, there is no mention made of the differences in structure, contents, or position of these cysts and common wens, which they are said to resemble. The old operation of plugging the posterior nares, fast becoming only a "relic of barbarism," is fully described as the treatment for severe epistaxis, and no mention is made of the far superior rubber air tampon, or of the fact that many cases of epistaxis can be efficiently dealt with by proper plugging of the nose from the front.

We cannot part from this book without expressing our sense of the magnitude of the task Mr. Gant set himself, and of the energy and perseverance he has brought to its fulfilment. We hope this edition will be as successful as its predecessors, and that we may soon hear that Mr. Gant is again busily engaged in revising it for a fourth issue.

Archives Slaves de Biologie. Dirigées par MM. MAURICE MENDELSOHN et CHARLES RICHET. Tom. I., Fasc. I. Paris: 111, Boulevard St. Germain. London: David Nutt.

THIS is the first part of a new journal which is intended to be the vehicle for the work of Slav biologists, who already are very numerous, and whose labours are at present only represented by memoirs scattered through French and German periodicals. The *raison d'être* of the Archives is clear. There are probably not half a dozen scientific men in England and but few in France or in Germany who can read Slav. Hence researches which have cost much labour and pains are either wholly unknown or are read only in the form of an abstract or highly condensed note, in which many important points are passed over without notice. The editors hope to be able hereafter to publish a fasciculus every month, but at present do not feel able to promise more than six parts per annum. Their intention is to translate and publish in the French language all important papers within a month after their publication, whilst in the case of less important articles a full but complete analysis will be given. Sections will be devoted to bibliography, critiques, and notes of recent discoveries in other countries. The bill of fare will include memoirs on biology, embryogeny, anatomy, physiology, histology, anthropology, zoology, and palæontology, together with physiological chemistry and physiological psychology. The present number contains many (fifteen) original memoirs and many critiques and analyses. Amongst these are a note by Fritsch on a human cranium found in the clay of Podbaba near Prague; a contribution by Godlewski to the theory of the circulation of the sap in plants; papers by Pocta and Werzejewski on the development of fossil and recent sponges; Lesshaft on compound joints; Kowalewsky on the nervous mechanism effecting dilatation of the pupil; Navalichin on the growth, development, and death of muscular fibres; Botkine on pernicious anæmia; Kourloff on the alimentation of phthisical patients; and Oberzut on the morphology of the bacilli of tubercle: altogether a very satisfactory list for the first number of a new journal, to which we wish all success. The papers are all in French.

Notes on Analytical Chemistry, for Students in Medicine. By ALBERT J. BERNAYS, Ph.D., F.C.S., F.I.C., Professor of Chemistry, Practical Chemistry, and Toxicology at St. Thomas's Hospital Medical and Surgical School, &c. Second Edition. London: J. & A. Churchill.

THE modest title of Dr. Bernays' little book scarcely does justice to it. Although exceedingly condensed, it is sufficiently detailed to guide the student through his practical work with little assistance from the teacher, and clear expositions of the nature and cause of the

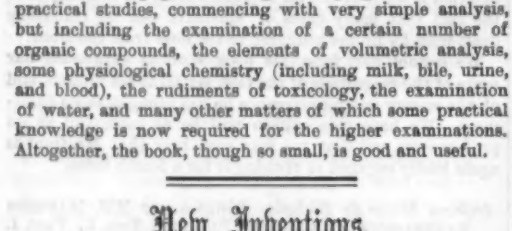
reactions concerned are uniformly given. Although it is intended to help students in preparing for the London University and other examinations, it is no mere cram text-book. The time that can be devoted to chemistry by even the most diligent student is very limited, and it is important that it should be judiciously expended. The book with which he works should contain little more than his real requirements, but should provide completely for them. This is exactly what Dr. Bernays has done, and medical students may be grateful to him for his work. In a space of about 130 pages he has given a progressive series of practical studies, commencing with very simple analysis, but including the examination of a certain number of organic compounds, the elements of volumetric analysis, some physiological chemistry (including milk, bile, urine, and blood), the rudiments of toxicology, the examination of water, and many other matters of which some practical knowledge is now required for the higher examinations. Altogether, the book, though so small, is good and useful.

New Inventions.

A MODIFIED MIDWIFERY FORCEPS.

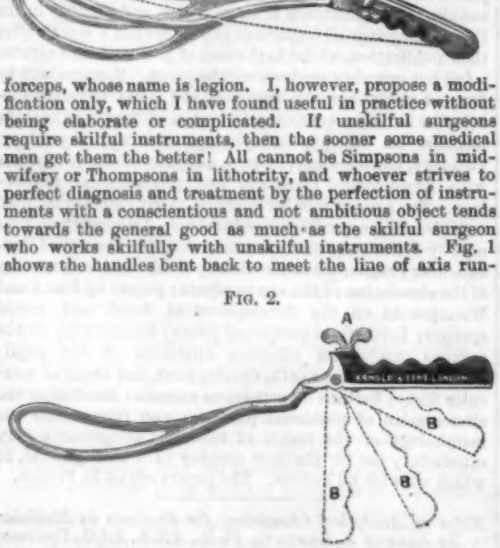
I WISH to bring under the notice of the profession a midwifery forceps which I think will fulfil (1) an indication for which much more elaborate, and, to say the least, terror-exciting instruments are from time to time brought out; (2) to meet a difficulty which is recognised, but for which no mechanical contrivance that I am aware of has been proposed; (3) to fulfil still another defect which is rarely considered by operators. It may be thought presumptuous to suggest anything further in the way of a midwifery

FIG. 1.



forceps, whose name is legion. I, however, propose a modification only, which I have found useful in practice without being elaborate or complicated. If unskilful surgeons require skilful instruments, then the sooner some medical men get them the better! All cannot be Simpsons in midwifery or Thompsons in lithotrity, and whoever strives to perfect diagnosis and treatment by the perfection of instruments with a conscientious and not ambitious object tends towards the general good as much as the skilful surgeon who works skilfully with unskilful instruments. Fig. 1 shows the handles bent back to meet the line of axis run-

FIG. 2.



ning through the fenestral, and by so doing dispenses with the aid of a traction force applied to the blades. Such a bend makes the instrument also easy of introduction, and keeps the handles in proper place when introduced. The non-recognition of this simple fact in the ordinary forceps has long kept in use a most unscientific instrument, whose axis is altogether erroneous. Contrivances have of course latterly been used to meet this difficulty, but in my opinion are not simple enough, or are too elaborate or bulky. Fig. 2 shows the chief advantage I claim for the instrument—viz., the presence of a screw hinge on the upper blade, which will make it easy of application, and fulfil an indication for which there is no provision at present made—i.e., the adaptation of the space between the blades to the varying size of the child's head; I think it very strange to squeeze the head of every child delivered by forceps to the same extent, and the evils ensuing therefrom, though not apparent, are nevertheless real. I wish to add my testimony to that of others in favour of the forceps being a more safe and desirable aid to delivery than is generally thought, not only in inertia, but where force and the obstacle of an unassisted process cause prolonged suffering, and weary both uterus and patient. With rather thin and well-shaped blades little or no bulk is added to the presentations, whilst the broad body formed by the head is changed into, as it were, a moving inclined plane, which, even without traction, slips out more easily than if left to the process of nature, and in my experience does more than almost anything, combined with the injection of oil, to save the perineum. We shall always, of course, have Radicals and Conservatives in medicine, but he who nowadays watches the wearisome process of prolonged labour in women whose tissues are weakened by the acquired and transmitted debilities of modern town life, with perhaps an increase rather than otherwise in the size of heads, will be more often conscientiously urged to supply a wanting balance in the shape of instrumental aid, but gently, slowly, and scientifically applied and used. The forceps have been contrived by myself and Mr. Arnold of Smithfield, to whom I am indebted for this and for other aid.

JAMES MACMUNN.

Finsbury Park, N.

THE PRESENT SYSTEM OF MEDICAL EDUCATION IN LONDON.

To the Editor of THE LANCET.

SIR,—Dr. Moxon's letter and the reply to it by Dr. Hood have a deep interest for the great majority of practitioners of medicine who have received their professional education in London, and also for metropolitan students in the present and future. As a general practitioner, I tender Dr. Moxon my warmest thanks for using his powerful pen and still stronger influence in endeavouring to obtain a degree for physicians and surgeons of the London Colleges. Why the hundreds of our best practitioners who have never had a degree should, as Dr. Hood asserts, degenerate to third-class men on receiving it I cannot see. Does Dr. Hood apply his dictum to the possession of any degree? Success in life does not, happily, depend upon having a degree, as the writer can testify; but it is not pleasant to be surrounded by Scotch and Irish graduates who pose before the public as holders of a superior, because a higher-sounding, qualification. Medical practitioners are not unfrequently consulted by parents on the question of professional education of their sons, especially with reference to the selection of a medical school. After explaining the disabilities under which metropolitan students suffer, I am compelled to advise the sending of them anywhere rather than to a London Hospital, unless they are prepared to put their sons through the long and weary work requisite for the obtaining of the London degree along with the many chances of failure before them. There should certainly be no longer any delay in putting London educated practitioners and students on a titular par with those of the north of England, of Scotland, and of Ireland. If this is not speedily done, not only will the London schools be more and more avoided by students, but the degree-granting institutions will be so crowded that the comparatively small clinical advantages belonging to the latter will become less available.

I quite agree with Dr. Hood that science should be taught at science schools; and I believe I am right in saying that advances have been made from St. George's Hospital to South Kensington for the carrying out of this object. For many reasons I think "Westminster" would be far preferable to "Albert" as a name for the new degree. The two following may be mentioned. "Albert" gives no idea of locality, and would necessitate a further affix of "Lond.," which would be an injustice to the holders of the veritable London degree; whereas "Westminster" at once localises and gives the prestige of antiquity to the degree.

I am, Sir, yours obediently,

May, 1886. PHYSICIAN AND SURGEON.

THE LANCET.

LONDON: SATURDAY, MAY 29, 1886.

THE Contagious Diseases (Animals) Bill has again been introduced, and will, it is hoped, pass into law before the close of the present session. Whether this success will be attained, or whether, as in the case of its predecessor of last year, it will be included in the long list of legislative measures which are sacrificed by an abrupt termination of the session, the next few days will probably show; but it deserves greater consideration than before, if for no other reason than the hope which Mr. W. H. POWER's recent investigations have raised that some really practical steps may be taken to prevent the disasters which now result from the distribution of infected milk.

With the greater part of the Bill we need not now concern ourselves; it relates to the amendment of the provisions of the Act of 1878, which have as their object the limitation of foot-and-mouth disease; but it also evidently intends that the whole subject of milk infection shall be considered in relation to the health of human beings, and therefore proposes that the powers vested in the Privy Council by Section 34 of the former Act shall be transferred to the Local Government Board. Under this section the Board will be empowered to make special or general orders for ensuring what is usually understood as the sanitary condition of dairies and cowsheds, and the cleanliness of milk stores, milk shops, and vessels used for containing milk for sale; and also for the inspection of cattle in dairies, and for prescribing precautions to be taken for protecting milk against infection or contamination.

The Privy Council have interpreted these precautions against infection to extend to the circumstances of the milk after it has left the cow, and have assumed that any infection from which it may become contaminated must necessarily be infection derived from some human being the subject of disease. Hence the precautions thus prescribed are those which would prevent infectious persons coming in contact with milk or taking part in the business of dairyman. Recent experience has shown the insufficiency of these precautions. That they may have a value we are prepared to admit; as against dissemination of enteric fever they are calculated to eliminate one very probable source of contamination, and even the infection of milk by scarlatinal virus communicated in this manner cannot but be regarded as within the bounds of possibility. But medical knowledge has, thanks to Mr. POWER, gone beyond this, and we are already led to see that the contamination of the milk against which precautions have to be taken may occur either before or at the moment the milk leaves the cow. The exact nature of these precautions cannot at once be seen; it may be hoped that they will, however generally, be apprehended before the lessons to be learnt from the Hendon farm are forgotten; and it may be assumed that they are essentially those which relate to the cow herself. We trust this is sufficiently appreciated by those responsible for drafting the Bill which is now before Parliament, and that all the necessary powers are being conferred upon the Local Government Board which can now be perceived to be necessary, and which may be more fully required as additional knowledge of milk infection is gained.

In view of the need for medical supervision of every detail connected with milk production and supply, it is somewhat surprising to find that, while the various sanitary authorities throughout England and Wales are to be entrusted with the administration of the Act, the metropolis is to be treated exceptionally. There can certainly be no desire to overlook the medical aspects of the subject, and we can but attribute the decision to continue the Metropolitan Board of Works as the local authority for all parts of London, except the city, either to the fact that the vestries and district boards have lost public confidence, or to the distinct advantage which results from entrusting these duties to one board having jurisdiction over the whole metropolis, rather than to thirty-nine district authorities. If the Bill is not to be amended in this particular, the metropolitan local authority must be provided with the organisation necessary to enable them to perform these difficult duties, and it would be certainly well if the Bill required them to take the steps required for this purpose. But the metropolis is in an unfortunate position with regard to its ability to guard itself against the dissemination of disease through infected milk introduced from without. It is dependent in a very large degree upon the efficiency of provincial local authorities, and over these it can exercise no supervision. Everything will therefore depend upon the thoroughness with which the Local Government Board watches over the action of these bodies. The making of proper regulations is a matter very different from their enforcement, and this duty of the Central Board should be undertaken with energy for the reason that the effects of any negligence will often not be appreciable in the district whose representatives will be responsible for the administration of the law.

THIS year the lectures at the College of Physicians illustrate the tendency in the mode of advance of scientific medicine. The Croonian and the Lumleian Lectures both dealt with scientific matters in a manner which none but scientific men could hope to understand in its entirety. In this regard we may perceive good grounds for the training in chemistry and physics, which should form part of the education of every physiologist and true pathologist.

The key-note of Dr. STONE's most able and successful lectures is very soon struck: physics, and without them nothing. There is a radicality in this method of dealing with the electrical conditions of the human body which to the logical mind commends itself as of the most philosophical and rigidly exact kind. Like all genuine advances, the Lumleian lecturer's position tends to displace much that was fascinating but incorrect. He insisted upon the great importance of absolute measurements of electrical currents. Professor HUGHES having shown that the telephone can be used for the estimation of electrical currents, Dr. STONE immediately takes up the idea and uses it instead of the unmeasurable and entirely empirical indications of the galvanoscopic frog. Perhaps the chief fact that the lecturer gave his audience was that concerning

the estimation of the resistance that the human living tissues offer to the passage of electricity. For the first time in medical electricity we think it may be definitely admitted that the resistance has been accurately ascertained to be about 1000 ohms. This estimate is of the tissues without the skin. The latter is a most perfect insulator of enormous resistance, hence the previous over-estimation of the resistance. But it was shown that by employing very large areas of contact and freely wetting the skin, its resistance could be eliminated. As having a direct bearing on medicine, the alterations of the resistance that take place in disease are especially interesting. In dropsy, it was found that the resistance was diminished; in one instance, as Dr. STONE ascertained, even to one-half. In six cases of hemiplegia with contracture the resistance was much less on the paralysed side of the body. Again, in impregnations of the tissues by various metals the electrical resistance was much altered; mercury had a decided influence in diminishing it, as also had copper, whilst the influence of lead was but slight.

The human body, like any fluid or body holding fluid, acts as an electrolytic agent. Certain chemical decompositions take place, and this is the equivalent of a development of electricity; electricity therefore begets electricity. By employing electricity as a curative agent Dr. STONE was able to make observations in certain cases of disease. In a case of old-standing sciatica with wasting of the leg, and in two of diabetes, it was found that by charging the body with a moderate strength of constant current for half an hour a considerable discharge took place from the body, which might last for several hours. The first and largest discharge that occurs after the body has been charged is probably to be accounted for as a phenomenon of self-induction; but the less marked though longer discharge is most probably due to electrolysis.

Most elaborate explanations have been offered concerning the phenomena of electrotonus, and one of the most revolutionising parts of Dr. STONE'S lectures was concerned with it. Science is measurement, and the latter is what Dr. STONE pleads for. He says in effect: "Let us have our groundwork sure; let us be quite certain what strength of current is being used; let us ascertain the resistance and polarisation of every wire and every part of the circuit, whether composed of dead or living matter, before we venture to think we understand the phenomena over which physiologists have laboriously pondered and too often ingeniously misinterpreted." Even if Dr. STONE'S arguments did not appeal to one's instinct for science and truth, which they undoubtedly do, he has at command *a posteriori* evidence of the importance and absolute necessity of his scepticism. In the experiment shown with telephones it was demonstrated that on making and breaking the current the telephone clicked; it, a purely physical instrument of research, gave a loud click with the break, and a softer sound with make. On withdrawing the coil along the slide, just as was done when experiments in physiology were made, both clicks grew fainter, until the softer disappeared. Just as in experiments on nerve-muscle preparations, the telephone reproduces the peculiar difference between make and break—a difference which in neuro-muscular physiology is ascribed to vital conditions. In the third lecture it was shown that induced currents could be measured, and that the resistance of the human tissues to them was much less than to the constant current. It would seem as though the induced current penetrated with the facility of a conical bullet as compared with the constant current, which rather resembled the slower penetration of the spent round ball. The human body, like all imperfect conductors, is probably more permeable to high-tension than to low-tension currents. As the lecturer urged, there is a great field open for research in physiological electricity, which, though a stately building, rested still on an unsafe foundation or *physical basis*.

THE questions recently asked in the House of Commons as to the prevalence of small-pox at Wooburn in connexion with the paper-mills in that place again give prominence to a subject which has from time to time received more than passing attention. The influence of the rags which are used in the manufacture of paper as vehicles of disease is distinctly recognised by all authorities on public health; and as regards one infection, that of cholera, the State steps in to secure the community from risk by the issue of Orders prohibiting the importation into England of rags from countries where that disease prevails. It is true that little is known which could prove the existence of actual danger in the case of cholera, whereas one of our current infections—namely, that of small-pox—has again and again been communicated through the agency of rags, and, the rag-sorters in paper-mills being first affected, the disease has spread to those with whom they associate. This is what occurred when a sudden outbreak of small-pox took place amongst women employed in the St. Mary Cray paper-mills, and the same has occurred again at Wooburn; and the public somewhat naturally ask, both in and out of our Houses of Legislature, whether something cannot be done to protect the public from the danger that ensues.

A distinction has always been drawn between the importation of diseases foreign to our climate, such as cholera, plague, and yellow fever, and those which we have always with us, in so far as legislative interference is concerned; and we are bound to admit that, so long as small-pox is one of our current infections, it would hardly be possible to prohibit the importation into one district of rags from another district where small-pox happened to prevail, except in so far as it might be practicable to offer proof as to the actual infectiveness of any given bales. But, assuming that there must be free trade in rags in so far as the manufacturers are concerned, it becomes a question whether the rags ought not in all cases to be subjected to some process of disinfection before they are used for the purposes of any manufacture, whether of paper or otherwise. And the question is the more pressing because there is reason to believe that some rags from abroad come from such institutions as hospitals. But considerable difficulties stand in the way. There is, under the Public Health Act of 1875, a legal remedy against any person who gives, lends, sells, transmits, or exposes without previous disinfection, any bedding, clothing, rags, or other things which have been exposed to infection from any dangerous infectious disorder. But, apart from a detailed knowledge of the history of each bale or parcel of rags, it is impossible to say that any one

or more samples have been so exposed; and hence, as a matter of fact, no remedy lies against the manufacturer. Indeed, it might be unfair to hold him solely responsible when, as a matter of fact, no practicable check can be, or is, placed on the proceedings of the original owner of the rags, or upon the marine store dealers who collect them in the first instance.

There are, however, two definite remedies. One lies in the disinfection of all rags before they are unpacked for sorting purposes. This action must, however, in the present state of the law, be purely voluntary on the part of the paper manufacturers; but it may be hoped that, with the machinery and steam power which are available in every paper-mill, the time may come when the cost of applying steam under pressure to all cargoes of rags may be effected so rapidly and economically that it will generally be resorted to. The other lies in efficient vaccination and revaccination both of the workers in the mills and of the surrounding communities. This latter remedy can easily be applied by all who have sufficient common sense to appreciate its protecting value, and manufacturers can use their influence to secure its practice amongst their *employés*. Small-pox is the only infectious disease against which there is an easily available and trustworthy means of protection, and its prevalence, whether in a paper-mill or elsewhere, points to the neglect of a simple and efficient remedy.

AT the time of our going to press the Medical Bill is precariously situated. The lukewarm character of the Bill, and the belief in every medical body that it and all its interests will survive under the measure, disarm opposition. However, we again cheerfully and gratefully admit that Sir LYON PLAYFAIR has shown a very courteous disposition to consider objections, and especially our own objections, to the obtrusion of the Privy Council at every stage of the work of the General Medical Council; to the inadequate proportion of direct representatives (especially for England) to the other constituents of the Council; and to the monstrous proposition that the Privy Council should have the power of ordering the Medical Council to register foreign graduates of whom and of whose degrees the Medical Council may disapprove. Sir LYON PLAYFAIR is understood to be ready to modify the clauses bearing on these points. He is prepared to give five direct representatives, and in certain eventualities a sixth. He will erase in many places the words requiring the sanction of the Privy Council, and in the serious matter of recognising foreign degrees he is willing to show more respect to the Medical Council. So far, so good. But all interested parties should use due vigilance. No one can visit the House of Commons in these excited days without feeling what a game of chance legislation is, and how slight and superficial is the remedy that even a Government can apply to the greatest evils. The forms of Parliament have been the death of many a Medical Bill. They prevented progress in committee on Monday night, when Sir LYON PLAYFAIR was hopeful of getting it practically through its committee stage; and he would be a sanguine man who in such a time of crisis and political tension as this would confidently expect a Bill to pass of which members of Parliament know but little and care even less. The intervention of the Medical Council to preserve the independent government of the profession would be of course most desirable; but by the time that body, which meets next week, shall have decided to intervene, the deluge may have come and swept the authors of the Bill away or it may have slipped through its remaining stages into existence. Meantime we must trust to the reasonableness of Sir LYON PLAYFAIR; and we must be grateful, as we are sure the profession will be, to Dr. FOSTER, who has most actively studied the Bill and all proposals of modification, and to whom, indeed, we owe many valuable amendments, especially that for the increase of the number of direct representatives.

There are still three great evils that are not touched by the Bill as it stands, and the non-removal of which will make any Bill a poor contribution to the solution of the problem of medical reform. We can only indicate them for the consideration of Sir LYON PLAYFAIR, or Dr. FOSTER, or any other member who will rise to the height of this great reform. The three evils which will remain are:—

First. The multiplicity of licensing medical authorities which will continue to compete with one another and to disparage each other's examinations.

Secondly. The undignified competition of degree-granting bodies with diploma-granting bodies.

Thirdly. The comparative impunity of medical practice by unqualified persons acting either alone or under cover of registered practitioners.

To say that such evils will remain unremedied under the Bill is to pronounce the most severe condemnation of it. But we must say what we feel, and we shall be glad if the author of the Bill or any of its critics can contrive, even at the eleventh hour, to make it really worthy of the profession whose efficiency it is to regulate, and of the public whose highest interests it is meant to serve.

Annotations.

"Ne quid nimis."

HER MAJESTY THE QUEEN.

IT is a subject for congratulation among all classes that Her Majesty has reached her sixty-seventh birthday in good health and with more than average constitutional vigour. The many years of retirement which followed the great grief which befell her in middle life seemed to thrust upon her a life of seclusion and sadness. It has happily been broken somewhat of late, much to the satisfaction and pleasure of Her Majesty's subjects, and we trust and feel assured with no injury to Her Majesty's health. It, however, must have been a considerable effort to reappear in public, and nothing but a deep sense of duty could thus have aroused anyone. Something is due to the judicious care with which Her Majesty has been tended, and we may take it as an expression of gratitude to our own profession that the first act performed by Her Majesty in public was to lay the foundation stone of the new medical buildings now being erected conjointly by the Royal College of Physicians and the Royal College of Surgeons. The kindly expressions on that occasion towards Her Majesty's physician were very grateful to the whole profession as an honour done to their highest representative in his capacity of President of the Royal College of Physicians; and the title offered to the President of the College of Surgeons on that occasion, though declined by

him, was not less grateful to the profession; for Mr. Savory is the premier of the great body of practitioners of the country who claim allegiance to the Royal College of Surgeons, and any honour done to him is in reality done to them through him.

THE FELLOWSHIP OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON.

AT an extraordinary meeting of the College on the 20th inst., the gentlemen elected at the last Comitia were admitted Fellows. The list, which has already appeared in our columns, this year was below the average in point of numbers, but was certainly strong as regards individual quality. Taking the whole list, especially with respect to the metropolitan members, the election this year has been most satisfactory. There has been less evidence of favouritism and a more liberal recognition of individual work. If the same care continues to be exercised, the Fellowship will once again take the high position with the profession and the public which it occupied in the palmy days of the College, when it was the mark of sterling achievement, and not the reward of mere success in practice. In making these remarks, we are aware that there is a very considerable number of Members of the College of old standing who feel aggrieved at being passed over, and who urge that they ought no longer to be ignored. No doubt cases of individual hardship in this respect do occur, but we believe them to be very rare, and hold it to be quite exceptional for good, sound, honest work to be permanently overlooked; and in London, where the line between consultants and practitioners is so rigidly drawn, we feel convinced that the Fellowship ought not to be granted except to those engaged in teaching in the schools or in original research. Even in the provinces the same rule should hold, and the Fellowship should be the reward of work, and not bestowed on account of wealth or of political or county influence. The list this year has been so good and so much in accordance with what we have for many years insisted on that we hesitate to add anything like criticism. But if there is a shortcoming, it is in the somewhat illiberal treatment of the provincial Members. Two or three names of physicians belonging to provincial schools have occurred to us who ought to have been among those recently elected, since their work is well known, and stands as high as that of any in the list. Our provincial schools are year by year increasing in size and influence, and we sincerely hope the present oversight is not occasioned by any feeling of jealousy. Such ought not to be the case; the College should view with pride the work of its provincial Members, and admit them to a full share of collegiate honours.

THE VACANCY IN THE SENATE OF THE LONDON UNIVERSITY.

THE election of a member of the Senate of the London University will take place on the 29th prox. Dr. Wilks and Mr. Magnus have been nominated as candidates for the vacancy, and the name of Mr. Thiselton Dyer has also been mentioned as a probable candidate. On Dr. Wilks' qualifications for this post it is unnecessary to dwell. His services to the cause of medical education and literature, his hearty aid to all projects for the improvement of the profession of which he is an honoured member, are too well known to need recapitulation. We are informed that the names of 200 graduates, including the most eminent members of the Medical Faculty, have already been received in his support. Mr. Magnus will be also known to our readers. He contested the last vacancy with Professor Carey Foster on the strength of his B.A. degree, and has of late made himself conspicuous by his action in regard to the reform of the University of which he now seeks to become a governing member. Coming forward to contest the present vacancy on his B.Sc. degree, and thus breaking the spirit, if not the letter, of the understanding that the seats of Convocation on the Senate alternately belong to the Arts and Laws Faculties on the one hand, and those of Science and Medicine on the other, it is to be hoped that Dr. Wilks will have a majority of votes sufficiently large to convince even Mr. Magnus that it is not well to attempt to run with the hare and hunt with the hounds. Moreover, the recent losses of Drs. Storrar and Carpenter have seriously diminished the strength of the medical representatives. The election, as already stated, will take place on June 29th, and voting papers are to be delivered personally to the Clerk of Convocation or sent by post at least one week before that date.

TRANSMISSION OF TUBERCULOSIS TO CHILDREN.

AT a recent meeting of the Boston Society for Medical Improvement, Dr. Gannett read a paper with the title "Should Nurses who are Tuberculous be allowed the care of Children?" (*Boston Med. and Surg. Journal*, April 29th.) Premising that he was not speaking of wet-nurses, and giving a slight sketch of the doctrine of the transmissibility of tuberculosis as raised in the bacillary hypothesis, he proceeded to relate two cases of fatal tuberculosis in children of previously good health and without hereditary predisposition, both of whom had been under the care of nurses who were tubercular. One was a child four years and eleven months old, who died from tubercular meningitis after a three weeks' illness. In addition to the appearances of general acute miliary tuberculosis, there were foci of chronic tubercular broncho-pneumonia and also chronic tuberculosis of the bronchial glands. There was no family history of tubercle; the child was born healthy, and was nursed by the mother until nine months old. At the age of fourteen months the child came under the care of a nurse about twenty-six years old, who had lost one sister of consumption, and was herself pale, but of healthy appearance. The nurse remained in charge for a period of three years and five months, and when the child was four years and two and a half months old it slept with her at night as well as being in her care during the day. About this time symptoms of phthisis developed in the nurse, and she had eventually to give up her situation from increasing weakness, four months before the child fell ill. It is possible that the child was infected through the lungs, which showed evidence of more chronic disease than other organs. The second case was that of an infant eighteen months old, who also died of meningitis, and in whom caseous nodules occurred in the lungs and bronchial glands, which contained tubercle bacilli. The only case of tuberculosis on the father's side was that of a great-aunt, who died of this disease after nursing her husband for the same affection; and on the mother's side a cousin had died of phthisis. The child in question was the youngest of three; its nurse, a Scotchwoman, twenty-two years old, was subject to colds and coughs, and developed signs of phthisis. She was in charge of the child for eleven months, from the age of six weeks. Dr. Gannett did not desire it to be thought that these cases proved that the children were infected by their nurses, but that there was "sufficient probability of such infection as to render it important for physicians to caution the laity about allowing children of a tender age to come into too close or frequent contact with nurses and others who are tubercular." In the debate that followed Dr. Minot thought there could be no doubt that the children were infected as stated; but he could only recall one case of such a form of infection—viz., in the wife of a gentleman in the third stage of phthisis. She developed the disease, having no hereditary ante-

cedents. Dr. Rotch, who had seen one of the cases related by Dr. Gannett, said there was certainly a remarkable coincidence in the tuberculosis of the nurse and child, but did not think it justifiable to say that there could be no doubt of infection. He pointed out how frequently tuberculous mothers lived in close contact with their children, who never showed any signs of infection. He thought it prudent, however, to exclude children from the care of tuberculous nurses. Dr. Fitz agreed on this point, owing to the probability of such a medium of infection, remote as that probability may be. Dr. White spoke in the same sense, and Dr. Bowditch declared that he had held phthisis to be contagious under favourable circumstances long before the bacillus was discovered.

THE THROAT HOSPITAL, GOLDEN-SQUARE.

THE dispute at the Golden-square Hospital, which has ended in the resignation of all but one of the members of the staff, appears to have had its origin in the interference by the managing committee in a question which, though small in itself, strikes at the root of the proper relations of the medical staff to the hospital. A resignation having created a vacancy in the days of seeing patients, the managing committee filled up that vacancy without previous consultation with the medical council. Then followed protests, recriminations, and finally a general resignation, with one exception, on the part of the staff, who considered justly that their rights had been infringed. The history of the whole matter, which extends over several months, is embodied in a lengthy document issued to members of the committee by the medical council, after their failure to get their grievance redressed. Although the domestic concerns of the Golden-square Hospital cannot be deemed of much general interest, yet whenever there is a conflict between a hospital staff and its managing committee it is important to investigate it for the sake of other institutions in which such a constitution is found. In 1877, owing to irregularities in management of such a character as to lead to the withdrawal of patronage in high quarters, the medical affairs of the hospital were placed in the hands of a council consisting of the acting and consulting medical officers. In 1883 the dean of the medical council was given a seat *ex officio* upon the managing committee, and the only other medical officer who has a seat on that committee is Dr. Morell Mackenzie, who also, by virtue of his position on the consulting staff, is a member of the council. In the present dispute Dr. Mackenzie appears to have taken part with the committee as against the views of his colleagues, who represented the medical council. The *casus belli* was the following: On January 26th last, within an hour of the meeting of the committee, the chairman persuaded Dr. Semple to resign his appointment on the staff, by reason of age and length of service. Had Dr. Semple declined to accede to this request, until, at least, he could have consulted his colleagues, the friction which arose might have been avoided. However, his resignation was received, and Mr. Hovell was nominated by the committee to fill the vacancy thus created. A protest from the dean against this undue haste led to the appointment of Mr. Hovell being held over until, according to custom, the day vacated by Dr. Semple had been offered to members of the staff in order of seniority. Unquestionably the committee acted in violation of precedent in not notifying the fact of Dr. Semple's resignation to the medical council, and asking that body to take steps to fill the vacancy. Nor in yielding so far as to offer to the senior physician the choice of the day so vacated did the committee wait to receive the advice of the council, for when Dr. Prosser James declined to accept the offer because the council had not been consulted, and when the next in seniority, Dr. Whistler, withheld his answer until the council had met, the managing committee without further delay proceeded to the appointment of Mr. Hovell. It is needless to pursue the steps of the controversy further. The council endeavoured, without success, to get a reasonable hearing or discussion of their grievances; their protest that the appointment of Mr. Hovell by the committee, without previous consultation with the medical council, was illegal was disregarded, and they acted very properly in sending in their resignations. The members of the staff have done right to protest against an unwarrantable attempt to ignore their advice in questions relating to their offices, and we are glad for the sake of the profession that they have had the courage to pursue their protest to its legitimate conclusion. Had they taken the same course nine years ago, the history of the hospital would have been different; but they then allowed their scruples to be satisfied with the formation of a medical council, which, it appears, is only a council in name and not in fact. The plea that it is the duty of the managing committee to arrange the days and hours of the attendance of the medical officers, and to see that this attendance is punctually made, cannot apply to the present circumstances, which involve—first, the occurrence of a vacancy; and, secondly, the selection of an officer to fill that vacancy: matters which, if there be a medical council at all, are precisely the questions with which they should be expected to deal, and upon which their advice undoubtedly should be sought.

FEAR AS A PATHOLOGICAL FACTOR.

IN the summer of 1884 Professor Mosso of Turin published his brilliant monograph "Sulla Paura" ("On Fear"), just in time to admonish the profession in Italy of how seriously that depressing emotion can intensify the ravages of such an epidemic as cholera; and now we have the same treatise, admirably translated into French by Felix Hément, justifying its reappearance by the renewed outbreak of that disease. There is much, however, not only of opportune but of permanent interest in the volume. The infusion of terror into the young growing mind—so frequent a resource in the nursery, and even, in different forms, in the schoolroom—is gravely censured by Professor Mosso in a special chapter on fear as a force in education. "Everything gruesome, terrifying, panic-striking, that is said or represented to the child is a thorn left in its moral tissue to wound it throughout life. Alarm, dismay, fright, cleave for ever to the memory, like a fatal creeping plant inwoven around the reason." And he infers the damage done by this means to the tender brain of the young from the paralysing effects of such moral reagents on the adult. Examples of the fatal effects of fear in these latter cases are vividly presented in his pages, and he even coincides with the late Sir James Simpson in deducing from the depressing moral atmosphere of a hospital the argument in favour of rendering surgical assistance at the domicile rather than in the ward. Fear, he maintains, not only aggravates but engenders disease; while Bosquillon goes so far as to say that it, and not the bite of the mad dog, is the only cause of rabies. Guy de Maupassant has quite lately defended the same thesis; and Professor Mosso himself records the case of a physician who, when called in to a hydrophobic patient in one of his convulsive seizures, examined the sufferer with special care, pressed his lips to the froth-sprinkled mouth, and assured him that his malady was not rabies; no other paroxysm supervened, and the patient recovered. Twelve years ago, in Paris, a poor woman, by trade a vendor of small wares, was bitten by a dog, undoubtedly rabid, near Notre Dame, and taken to the Hôtel Dieu, where the wound was at once cauterised. Several months after she was recognised in the street by a student who had seen her under the operation:

"Tiens," he exclaimed, "vous n'êtes pas morte? Le chien qui vous a mordue était pourtant enragé." The poor woman, dismayed, was soon afterwards seized with pharyngeal spasms of the most violent kind. Admitted, *d'urgence*, to the clinique of Dr. Bucquoy, she was put under treatment, but without avail, and died soon afterwards. The case, as it occurred, was recorded and commented on at the time in the *Gazette des Hôpitaux*. The dramatic interest of Professor Mosso's work, which loses nothing in the French translation, might be illustrated by many an excerpt; but its value has another and sounder basis. The physiological study of the effects of fear on the viscera, and secondarily on the nutrition of tissue, is a meritorious specimen of scientific induction, and prepares the mind for a prompter acceptance of conclusions which would otherwise have seemed accessible only by the "high priori road."

GARIBALDI'S BODY-PHYSICIAN.

DR. BERTANI, the organiser of Garibaldi's field hospitals, has within a fortnight been followed to the grave by a scarcely less interesting figure, Dr. Giovan Battista Prandina, the General's body-physician. This accomplished practitioner and intrepid patriot was born in Milan in 1816, and was already in great request by a wide *clientèle*, when the upheaval of 1848 drew him, like so many other generous natures, into the struggle for Italian unity. He first served under King Charles Albert, and shared with him and young Victor Emmanuel the dangers and disasters of the campaign that closed in 1849 at Novara. He again resumed active professional work, this time at Chiavari, labouring assiduously among the poor of the district, and so distinguishing himself by his devotion during the cholera epidemic of 1857 that his services were recognised by two gold medals for "valour as a civilian." Two years thereafter he accompanied the Piedmontese troops on their triumphal entry into Milan, having served on the army medical staff as Garibaldi's physician, in which capacity he so won the confidence of the General that he was his constant attendant on all his Italian campaigns. In 1862 at Aspromonte, and, later, in the prison at Varignano, at Spezia, and in the islet of Caprera, he never left the side of his illustrious chief so long as the physician's art could cure or could comfort. Again he was drawn from general practice by the campaign of 1866, and again he was of great assistance to Bertani in organising the field hospitals; and a year later we find him, in the desperate invasion of the States of the Church, rendering active service under fire at Monte Rotondo, and even reinforcing the combatants in their Parthian retreat at Mentana. After this campaign he once more resumed professional work, chiefly among the poor, helping forward by his medical skill or his pecuniary means every institution for their well-being, moral and physical, while always keeping himself informed as to every phase of the declining health of his beloved General. Thirty-six is the number of the institutions, benevolent and patriotic, of which he was a steady promoter, and at whose anniversary meetings he was always an idolised assessor. On the death of Garibaldi at Caprera, in the June of 1882, he produced the General's will, which had been secretly confided to him in 1877, according to which the mortal part of the illustrious deceased was to have been consumed by cremation. But the document was not respected, Dr. Prandina's protests were overborne, and he retired from the island in just indignation at the authors of the counter-plan. This professional devotion was still as strong as ever—though advancing years and a much-tried constitution warned him to relax,—when, at the close of April, he contracted a feverish cold. He then wrote to a friend: "Vado a Meina; là guarirò del tutto o mi farò seppellire nel lago" ("I am going to Meina; there I shall either be quite cured or get buried in the lake"). At first the change seemed to answer; but the slight return of strength seduced him into going out of doors: the day was treacherous; and, a relapse supervening, he died serenely on the 15th inst.—the day on which, seventy years ago, he was born. His funeral was one of the most impressive witnessed of late years; and over his grave, to an audience composed of thousands of humble witnesses to his benevolence and skill, the poet and publicist, Felice Cavallotti, delivered a splendid discourse on this physician, now laid so honourably to rest.

SANITARY REORGANISATION IN MARYLEBONE.

AN important step is being taken in Marylebone with a view to the reorganisation of the sanitary department, which has not, according to public opinion as recently expressed, been maintained at a proper standard. A committee was appointed to report on the subject, and, with one exception, all their recommendations are to be carried out. The first relates to the registration and supervision of sub-let houses. As an experiment, 150 of these houses were registered shortly after the outcry against the method in which the working-classes were housed in the metropolis, and the result is stated to have been so satisfactory that the number is now to be gradually increased up to 1500. It is also at last admitted that the method of dust removal in force is a failure. The "Lump Contract" system is an unwise one, for the contractor's main object, when he arranges for the work for a specific period, must be to make as much as he can out of the transaction. Until March, 1887, the present system must be retained; but it is expected that before that time arrives the Sanitary Committee, with the aid of the medical officer of health, will have a better scheme to submit; and it is suggested that the contracts about to come into force shall be placed under the supervision of the sanitary department, and that an experiment should be made with the movable pail system for some portion of the district containing about 500 houses. Re-arrangement of the inspectors of nuisances is to be made, so that each shall be responsible, amongst other things, for dust removal and inspection of registered houses in a definite area; and two additional officers are to be appointed. And, with a view of relieving the medical officer of health and the inspectors of nuisances from the more formal and clerical work of the office, a sanitary clerk is to be appointed to the health department, and is to keep and register complaints, have charge of the records of sub-let houses, attend to summonses under the Sanitary Acts, &c. The only point which remained to be dealt with was a structural alteration with a view of giving better access to the sanitary department, and this is postponed. The changes inaugurated are important, and we trust that they will be carried into effect with determination and energy.

ACROMEGALY.

UNDER the name of Acromegalie M. Marie describes a curious affection characterised by an acquired hypertrophy of the upper and lower extremities, and of the head. The hands, feet, and head especially become enormously enlarged; the skeletons of the hand and foot are of gigantic proportions, and without appreciable deformity. In singular contrast the forearms, arms, and legs preserve their normal size, or only increase in size to a slight extent, as in cases described by Friedreich. The bones of the face suffer when the head is affected, and the general form of the countenance assumes that of an ellipse with its greatest vertical diameter considerably elongated. Besides these characteristic deformities, there exist others of less importance—curving of the spine forwards, augmentation of volume of certain bones (clavicles, ribs, patellæ, iliac bones),

but not of the long bones, tendency to hypertrophy of the fibro-cartilages of the ear and larynx, slight deformity of joints, wasting of muscles, deafness and blindness, hypertrophy of the tongue, preservation of general sensibility, spontaneous pain, a tendency to varicose veins and hæmorrhoids, considerable thirst, abundant flow of urine, and absolute integrity of the skin with a certain condition of cachexia. The disease effects males and females between the ages of fifteen and thirty-five; but apart from the disappearance of the menses nothing is known of its etiology. M. Marie speculates on the nature of the affection, and inclines to regard it as due to a vice in the development of the osseous system analogous to the disease known as primary progressive myopathy. Clinically, the disease recalls myxœdema, osteitis deformans of Paget, and leontiasis ossea of Virchow.

THE WINTER OF 1885-86.

MR. CHARLES HARDING read a paper at a recent meeting of the Royal Meteorological Society which well deserves the attention of members of our profession, as supplying suggestive data for the study of weather in relation to disease. As a matter of fact, the winter of 1885-86, now happily drawing to a close though not quite ended, has not been productive of a high mortality or of prevalent disease, although it has occasioned very great suffering as well as distress. The large class of people who are afflicted with "nerves"—to use a popular expression—have been exceptionally strained and demoralised by the long persistence of "depressing" influences. There have also been many cases of rapid, and to some extent unexpected, death, occurring among persons who, while apparently in average or even more than average health, failed in force and tone with especial readiness when subjected to exhausting or inhibitory agencies. Thus, the number of deaths from pneumonia has been significant, if not really high. We are beginning to recognise that this malady is not a sthenic inflammation. It has a close relation to those states of the organism, however induced, in which the quantity of oxygen available for metabolic purposes is small; and probably to other states which are either the immediate results of blood-poisoning or render the organism peculiarly susceptible to what may perhaps be loosely called mephitic influences. In short, the pneumonia of recent days differs essentially from that for which our fathers and grandfathers were freely bled and purged, and is more closely connected with sewer gas and other forms of poisoning than with those reactionary inflammatory processes which are commonly regarded, or more accurately speaking used to be regarded, as the effects of chill. The congestion set up is what was once called "passive" rather than "active," and, instead of consolidation with effused lymph, there is loading of the organic structures with an exudation in which cells preponderate and fibrination does not speedily occur. All forms of disease have, during the recent winter, tended to what may be characterised as a low and rapidly exhausting type, with depressed nerve forces and vaso-motor disturbances of extreme degrees and wide variations. Mr. Harding's paper throws light on some of the atmospheric causes which have been at work, playing an important part in the production of the phenomena which practitioners in medicine, at least in populous districts, can scarcely fail to have observed. It seems that the *earth* has been colder than usual as compared with the air, being only some two degrees above the temperature of the atmosphere. This is a most important matter from a health point of view, particularly as regards the classes of persons who are susceptible to slight changes of temperature. The earth's temperature would seem to play the part of a stable point or centre around which fluctuations may take place harmlessly. Speaking generally, the winter has been excessively long, and the durations of spells of cold have been remarkable. Our readers will do well to study the paper in detail; but the relation of the earth's temperature to the atmospheric temperature is the point to which we desire to direct particular attention. From March 1st to the 17th, as Mr. Harding tells us, the earth was colder than usual by amounts varying from 6·3° to 8·5°; and, which is the important fact, it approximated more closely than usual to the temperature of the air around. Electric and magnetic conditions, undoubtedly affecting the nerve state in a marked degree, must have been greatly modified by this bringing together of what may be compared to the centre of gravity and the meta-centre in relation to meteorological equilibrium.

THE COLONIAL EXHIBITION HOSPITAL FUND.

THE first of the "Mechanical Beggars," invented by Dr. James H. Aveling, has been placed, as suggested by him, in the Colonial Exhibition, and is now busily begging for the London hospitals. It has been inspected by Her Majesty the Queen, their Royal Highnesses the Prince and Princess of Wales, the Duke and Duchess of Connaught, the Duchess of Albany, and the Princess Beatrice, who expressed themselves much pleased with its mechanism, and tested its working by depositing coins in the donation-box. It is to be hoped all visitors will follow the good example thus set; for if everyone who enters the Exhibition were to give but a penny, the amount realised would be about £10,000. The Exhibition "Mechanical Beggar" has two windows, through one of which may be seen a card in constant motion with "Pray give" on it; and through the other, but only when a coin is deposited, a card with "Thank you" on it, which jumps up and remains in sight a few seconds. The donations are collected by the cashier of the Royal Commission, and it has been proposed to hand over the sum realised to the Committee of the Hospital Sunday Fund for distribution.

SMALL-POX HOSPITAL ACCOMMODATION.

LAST week Mr. Stansfeld received, at the offices of the Local Government Board, a deputation which urged that there was no necessity for the proposed hospital at Darenth. Mr. Sly, the chairman of a conference of metropolitan boards of guardians which had been held upon this subject, acted as principal spokesman, and pointed out that the past experience of similar institutions had not been sufficiently satisfactory to warrant the expenditure of a further sum of £118,000 upon that at Darenth, while another guardian thought that a better site could be obtained on the waste land near the small-pox ships. The action of the Metropolitan Asylums Board in denying any responsibility for the effects of these institutions has raised a hostile feeling in the minds of many metropolitan local authorities, and has taught London to think of these institutions in any sense but that of preventers of disease in a community, and to this feeling is no doubt to be attributed the opposition of the present time. The Asylums Board have attempted to meet the difficulty of dissemination of small-pox from the aggregation of persons suffering from this disease only by removing the sick to a distance from London, and although this must minimise the evils which result from hospital treatment of small-pox, the managers are practically only postponing the evil day, which must come sooner or later as London grows. The means they have provided for the removal of the sick are so admirably designed that this is accomplished with much less fatigue and inconvenience than formerly, when the distance was less. The fact, however, remains that during epidemic times some aggregation of very severe cases must take place within

the Metropolitan area, and Mr. W. H. Power has clearly shown that the housing of only nine such persons is sufficient to give rise to an outbreak of disease in the neighbourhood of the institution in which they are placed. The difficult problem of hospital provision for small-pox is not yet solved, nor is it being solved; while therefore we may admire the public spirit of the managers in endeavouring to make provision for small-pox patients before the appearance of the next epidemic, we would gladly see some portion of the funds at their disposal devoted to the construction of an institution which should not be liable to the same accusations as were made with so much reason against the hospitals at Fulham, Hampstead, and Homerton. London is accustomed to regard the isolation of cases of small-pox as an important means of safety to individual households, and it should surely be possible for this to be effected without recurrence of the misfortunes which have attended all former efforts.

STATUE OF THE LATE ERASMUS WILSON.

THE simple but impressive ceremony of Tuesday last in the grounds of the Royal Sea-bathing Infirmary, Margate, went off to the evident satisfaction of all concerned. As soon as the occupants of the special train from London had arrived on the scene, Sir James Paget stepped, uncovered, on to the platform and opened the proceedings in the simplest possible manner. In a few admirably chosen sentences, every one of which told with his audience, Sir James depicted the remarkable career of Sir Erasmus Wilson, pointing out the growth of his riches, the success of his practice in dermatology, and his great love for medical science especially. The benevolence which Sir Erasmus loved to exercise was not bestowed in a general manner, but was guided by discretion and applied to objects in which the benefactor took a personal interest. Late in life Sir Erasmus became what was rare—an ardent and successful student of Egyptology; and the obelisk on the Thames Embankment would remain a permanent monument of this study. Mr. Russell Lowell, in the capacity of Vice-President of the Egyptian Exploration Fund, also testified to the love that Sir Erasmus Wilson bore to the study of Egyptology, and for two years he had defrayed the expenses of this fund. The bronze statue was unveiled by Sir James Paget, and revealed a most artistic piece of work, executed by Mr. Brock, A.R.A. After the unveiling of the statue, the visitors were invited to inspect the buildings of the infirmary, where they had an opportunity of witnessing the valuable additions made to the ancient building by the munificence of Sir Erasmus Wilson.

PHOTOGRAPHING THE RETINA OF THE LIVING HUMAN EYE.

A PAPER with this heading appears in the *Photographic News* of May 7th, by Mr. W. T. Jackman, of Coggleshall, Essex, and Mr. J. D. Webster, and the authors of that paper have been kind enough to forward to us specimens of the photographs they have obtained. The difficulties of making a good photograph of the fundus are extreme, and we can only congratulate these gentlemen on the results of their labours, though it must be admitted that, as yet, it only appears to be possible to obtain a picture of the optic disc and of the retinal vessels as they cross the disc. The first experiments of Messrs. Jackman and Webster were made by placing a small camera fitted with a 2 in. lens in the place of the observer's eye behind an ordinary ophthalmoscopic mirror, but subsequently various modifications were introduced which are fully detailed in the paper referred to. The best light was found to be an albo-carbon gaslight, having a reflector behind it and a bull's-eye lens in front. It was well borne by the eye. The reflection from the surface of the cornea was long found to be very embarrassing, but it was overcome with the exercise of a little ingenuity. In the photograph we have received, the physiological cup in the centre of the disc is very perceptible with the marginal portion of the disc, and the main blood-vessels and their primary divisions are distinctly marked. The result is sufficiently encouraging to lead us to recommend the authors of the paper to persevere in their efforts, and not to be discouraged by failure. Much greater difficulties than those which are here presented have been overcome by patience and the intelligent application of existing knowledge, and we expect soon to receive a still more satisfactory representation of the fundus of the eye.

HOSPITAL SATURDAY IN BIRMINGHAM.

SATURDAY, the 22nd inst., was the day appointed for paying in this year's contributions from the workpeople of Birmingham towards the support of its medical charities. The movement has been a brilliant financial success from the date of its initiation in the midland metropolis in 1873; and it is specially worthy of note that, trade depression notwithstanding, the annual total steadily grows. The Birmingham Joint Stock Bank, where the collection is always paid in, opened its doors for the special purpose at three o'clock last Saturday afternoon, and the staff remained cheerfully at work until nine o'clock. The *Birmingham Daily Post* reports that "at four o'clock 262 contributors were credited with £2944; at five, 360 with £3566; at six, 442 with £3980; at seven, 543 with £4386; at eight, 647 with £4818; at nine, 774 with £5332 10*s.* 6*d.* Last year the amount received at nine o'clock was £5094, and the number of contributors 809, so that the average contribution was £6 17*s.* 9½*d.* this year, against £6 5*s.* 11*d.* in 1885. These averages, however, are necessarily reduced by subsequent payments, inasmuch as all the larger contributions have been received. If, however, the subsequent payments raise the total at the same rate as they did last year, the workshop collection will reach £6712, as against £6446." The firms whose *employés* are at the head of this year's list with amounts over £100 are: G. Kynoch & Co. (Lim.), £371 16*s.* 8*d.*; Nettlefolds (Lim.), £139 8*s.* 9*d.*; Tangyes (Lim.), £102 8*s.* 1*d.*

BURIAL REFORM.

BURIAL, it seems to us, holds indisputably the first place among the various methods which have been adopted for the disposal of the dead. Not only does it present the various advantages which have been claimed for other systems, including that of cremation, but it meets the objections which have been urged against these on religious, social, and judicial grounds. In speaking thus, however, we must not be taken to deny the need of reform in our present customs of interment. On the contrary, we acknowledge traditional errors in this respect, and speak rather of what burial should and must become than of what it commonly is. That process which is exemplified throughout the generations of nature must be our model in this purely physical matter. We are made out of the earth, and we but follow the law of all created forms when our bodies are finally restored to the earth. But if we maintain this rule, we must uphold it in its simplicity. The stout case in which we are wont to enclose the dead, and fruitlessly to forbid decay, must be abandoned. To retain its use is a blot upon our civilisation. We corrupt Nature while we profess to copy her, and we store up for ourselves under our very feet the accumulated and postponed decay of many years. The more perishable the covering, the better for our purpose and the better for the health of the community. It may

be thought that further argument on this subject is hardly necessary, but we cannot forbear from expressing thus shortly our own opinion in support of the work which is being carried out on the same lines by the Church of England Funeral Reform Association. At a meeting of this Society at Grosvenor House on the 22nd, the Bishop of London spoke in favour of the adoption of measures for promoting "a fuller appreciation of the idea of Christian burial." Mr. Seymour Haden followed with a speech in which he showed that simple interment, such as we have above described, was not only by far the most suitable on economic and sanitary grounds, but was the form most strictly in accord with the familiar words which are daily heard committing "earth to earth." The resolutions proposed by both speakers in these terms were unanimously carried, as was also that in which both they and the Duke of Westminster agreed in recommending to all classes, especially to the wealthy, the duty of asserting by example the need of this salutary reform in our mode of burial. It is by organisation of this kind that public opinion can best be influenced on this important subject, and we may therefore expect that in time the present cumbrous practice will be replaced by others newer and better.

STRENGTH OF WILL.

To the logician and the practical thinker no subject is of deeper interest than the power of the will, as exemplified in the control of the passions by the higher mental faculties. Theoretically, everyone admits that the will is a great power; but not all are agreed as to the degree of its supremacy, and its capacity for development by careful culture and persevering exercise. Memorable historical incidents attest the difference which men and women exhibit in their power of controlling the emotions when called upon to witness or to endure suffering. When Moreau, seated on his charger at the battle of Dresden (Aug. 27th, 1813), beside the Emperor Alexander, had both his lower limbs shattered by a cannon-ball from the French lines, he was carried to the rear without uttering a groan, and placed upon a table in a cottage to undergo amputation of the right leg. He asked for a cigar and smoked it leisurely while the surgeon did his work. In a short time the latter expressed fears that the left limb was also so much damaged that it was very questionable if it could be saved. "Then cut that off too," exclaimed the heroic General, and he remained immovable throughout. How different the temperament of the great Sir Robert Peel. When carried home after a fall from his horse on June 29th, 1850, he was so exquisitely sensitive that he could not bear Sir Benjamin Brodie and the other attendants to touch him. It was found impossible to reduce his fractured clavicle. After death another fracture was discovered of the fifth rib, pressing on the lung; but the case was really one of a man of grand intellect utterly unable to subdue his emotions when suffering from pain. It is a popular idea that, in spite of their more sensitive nature, women can exercise more self-control and bear pain better than men do, and some extraordinary cases may be adduced in support of that belief. Dr. Paul F. Eve, in his "Collection of Remarkable Cases in Surgery," reports this instance of Cæsarean section successfully performed by a negress upon herself in the year 1769: "Being in labour, she seized a butcher's broken knife, about two inches and a half long, and cut through her abdominal wall on the left side near the middle line. The right thigh of the child presented, and it came into the world by the action of its own struggling. A negro midwife was sent for, who cut the umbilical cord and returned the part adhering to the placenta, and a considerable portion of the intestine also, into the abdomen, as it had come out of the wound with the child. The surgeon who attended the plantation was sent for a few hours after the accident; and judging, from the situation in which he found the patient, that some dirt had been put into the wound by the old midwife with the intestines, he cut open the stitches that had been made and carefully washed the parts clean, extracted the placenta at the wound, and then stitched it up again. The child lived five days. The woman recovered perfectly, menstruated regularly, and became pregnant again." Terrible as that occurrence was, how much more extraordinary was the fortitude of the Roman woman whose case was fully related in our columns last week. The facts would be incredible but for the signed attestation of Drs. Baliva and Serpieri, who were called to the patient thirteen hours after the first incision, and six hours after the small intestines had projected through the wound. Let the reader picture to himself the fact of the poor woman, oppressed with shame, three hours after midnight, long before the sun had risen—for it was March 28th,—alone in a peasant home on the slope of the Apennines, just thirty-nine miles from Rome, determining that she would give the lie to scandal, seizing the kitchen knife, thrusting it into her womb, wounding the child as she tore it out, binding herself up, walking into Viterbo to breakfast with her sister, and again homeward, only then fainting as the intestines gushed through the wound. The tragic picture has its ennobling side as a practical lesson of strength of will.

THE PROTECTION OF WEIRS.

WHEN an accident is evidently due to neglect of ordinary care on the part of those who suffer by it, we may refrain from censure where the debt of hardihood has been so dearly paid; but we cannot recall such events, nor can we by any mere contrivance prevent their occurrence. The accident at Bray, by which a boat was swamped in the weir and several lives lost, does not, however, seem to have been of this kind. An eye-witness writes that it was blowing hard at the time, and that steering was very difficult, while the disaster was clearly in no way due to want of skilful management on the part of the occupants of the boat. The mishap, moreover, is not a solitary one; similar fatalities have happened before in the same circumstances. It is to be hoped, therefore, that the lesson thus rudely taught will not be allowed to pass without finding its practical application, and that the Thames Conservators will recognise the duty and advantage of protecting weirs in some such manner as has been suggested, so as to limit the risks of boating on the river to those dangers which can with care be avoided.

CHOLERA IN ITALY.

IT is by no means easy to explain the state of affairs as regards cholera in Italy. Up to the 19th inst. there was a daily record of cases and deaths from the province of Brindisi, and up to the 20th inst. official information was regularly given as to the daily fatality of the disease both in Bari and in Venice. But from that date all news has ceased. It is hardly possible that the prevalence of cholera, which had been for some time maintained, and which had caused a substantial number of deaths every day for some time past, should have suddenly ceased, and this simultaneously, at both extremes of the Italian peninsula; and we feel bound to assume that, for purposes which we do not pretend to explain, the information as to the real state of affairs is being suppressed. It is, of course, possible that there has been a diminution in the extent of the outbreaks, and that it is thought best not to provoke the imposition of further quarantine measures now that these have become unnecessary. But, on the other hand, it must be remembered that, in view of the advance of the season when certain

parts of Italy are largely invaded by visitors, there would also be a strong inducement to hush up any extension of the epidemic. In the absence of all official returns, time alone can make clear the reasons for a suppression of information which must almost certainly have taken place.

SUICIDE OF A LUNATIC WHILE UNDER LEGAL CONTROL.

WE are not inclined to criticise the dealings of relieving officers with actual or alleged lunatics too severely, because we thoroughly appreciate their difficulties; but it ought to be a rule of practice, from which no departure should be allowed, that whenever and wherever a person is brought under the notice of a relieving officer as "a person of unsound mind not under proper control," or under any similar definition, such officer should take measures for his protection, as though he were both suicidal and homicidal, until he is finally discharged from his custody. A recent case, at Eastbourne, of suicide under conditions such as these is peculiarly distressing. There is only a minimum of blame to be attached to the officials concerned, because in this instance so much doubt existed as to the insanity of the person who ultimately committed suicide that two medical practitioners had actually certified that the alleged lunatic was of sound mind. Nevertheless, the fact remains that, due protection not being afforded, the poor man cut his throat while under legal control. The occurrence is a deeply regrettable one, and the rule of which we have spoken ought most certainly to be made; but we do not think there is any need of grave censure in this case as matters now stand, or as the duty of relieving officers is at present understood.

A LIBEL ON A SURGEON IN NEW ZEALAND.

THE *Lyttelton Times* of New Zealand contains a very full report of the trial of an action for libel brought by one of the surgeons of the Christchurch Hospital against the proprietors of the Wellington *Evening Press*. The libel complained of was contained in a highly coloured article, headed "Extraordinary Hospital Scandal; Revolting Disclosures; Manslaughter or Worse, ..." in which it was stated that at the Christchurch Hospital a man had recently been submitted to an operation for the radical cure of hernia, and had died owing to the "incompetence and criminal negligence" of the surgeon; and it went on to make many other painful statements. The whole story is a long and, we may add, exceedingly painful one, for it exhibits the profession in this colony in a very unpleasant light. It seems that a patient was admitted to the hospital for the express purpose of having this operation performed, that the operation was a difficult one, and that the man died in a few days with symptoms, in our opinion, of peritonitis. A most imperfect necropsy was made, and an inaccurate certificate of death was given. A colleague of the surgeon in charge of the case thereupon lodged a complaint with the hospital board and an inquiry was held, the result of which was that the surgeon was exonerated. Thereupon his colleague wrote to the Colonial Secretary, who very wisely refused to authorise a Government inquiry into the case. This same gentleman then had an interview with the writer of the article in question, who, as a result of the interview, wrote the alleged libel. We cannot refer to many minor points and side issues that were brought into the case. They do not materially affect it. We greatly regret such an occurrence, which can only tend to degrade the profession, and therefore injure the public. The operation appears to have been fully warranted and to have been properly carried out, although the result was fatal. As it was the first time such an operation had been performed at the hospital, or even in the colony, it would have been better to have had a consultation of the surgeons on the staff previously, and to have obtained their sanction and co-operation before proceeding further. Afterwards, a complete necropsy should have been made, and the cause of death carefully verified. But we fail to see how these errors justify the course that was taken by the colleague. A hospital can only be worked successfully when the staff are colleagues in more than name, and are ready to help each other in every way, and to share the responsibility of the position, which must at times press heavily. It was an extreme measure to bring this case before the hospital board; it was a grave mistake to make it the burden of a complaint to the Colonial Secretary; and when these authorities failed to interfere, it was altogether wrong to allow such charges as those we have quoted to get into the public press. Had we the space and the inclination to go into the case in all its details, we could easily point out flaws in the conduct of all the prominent actors in it. The verdict of a majority of the jury was in favour of the plaintiff, with one shilling damages, and with this finding we are inclined to agree.

THE BRECHIN ALMSHOUSE AND MEDICAL ATTENDANCE.

WE regret to see that Sheriff Currie Thomson has reversed the decision of Sheriff Robertson, which recognised the claim of Dr. Lawrence to be paid for his medical services to Miss Jamieson whom he attended in the Brechin Almshouse as a pauper, but who was afterwards found to be a lady of some property, and to be quite unfit to receive parochial medical attendance. The Sheriff Principal considers there was no contract between the deceased and Dr. Lawrence, only between the deceased and the parochial board, which included medical attendance on pauper terms, and expresses an opinion that a claim might lie against the board, who were paid by the deceased for, *inter alia*, the services of Dr. Lawrence, but who clearly had no right to be asked to attend a lady of property as if she were a pauper. We hope Dr. Lawrence will get a verdict against the board that will make them more careful in protecting the services of their medical men from abuse.

INFECTION AND REGISTRATION.

THERE is a good deal of force in the suggestion that means should be taken to prevent the transference of contagion in registration offices from those who have lately waited on deceased persons. It is among the poor, for obvious reasons, that infectious disease is most virulent and most fatal, whilst measures of cleanliness and isolation are alike difficult to apply. For the purpose of registering death, moreover, it is the rule that a relative present at the death, or someone who has been in attendance during the last illness, should be the bearer of the medical certificate. Under these circumstances, in addition to the fact that the registrar's office is not usually a spacious one, while the time of attendance is very limited, there can be no doubt that persons who have come thither from uninfected homes, notably those who attend to register births and may themselves be in poor health, may readily contract a dangerous or fatal illness. In considering how best to meet a difficulty of this kind, it is often more easy to propose a remedy than to apply it. Arrangements have to be made with regard to other business, and premises which are shown to be unsuitable may not admit of instant alteration. Fresh air and disinfecting substances are fortunately always at hand, and it would be well if registrars would frequently avail themselves of these useful purifiers. On the same principle, we may recommend to the heads of this department the manifest advantage of choosing for

offices, wherever available, rooms of good size and capable of easy ventilation; nor does it seem a difficult matter to arrange that the time fixed for birth registration should precede or be separated by some interval from that allotted to recording death certificates.

PORRO'S OPERATION AND SIMPLE CÆSAREAN SECTION.

UNDER this title, in the *Journal de Médecine et de Chirurgie* for the current month, Dr. Just Lucas Championnière has summarised a report which he recently addressed to the Paris Society of Surgery. It is a noteworthy fact that for more than one hundred years no recovery has followed the performance of the ordinary Cæsarean operation in Paris, whereas M. Championnière has saved two out of four mothers on whom he performed Porro's operation, all the children surviving. These results and Dr. Godson's statistics notwithstanding, it is difficult to form an exact estimate of the value of the two operations. In country practices the simple Cæsarean procedure is not unfrequently successful, even when performed with comparatively little care; and it becomes a question whether those successes might not be made to exceed the results of Porro's operation, by utilising the advances of surgical therapeutics. M. Championnière had felt inclined to prefer the simple Cæsarean operation; but later and fuller experience has in his judgment weighed in favour of Porro's procedure, especially so in the hands of surgeons experienced in abdominal operations, and who have all surgical resources at command. He advises the simple Cæsarean operation in cases of fibrous tumours of the uterus, because they frequently render removal of the organ an impossibility.

PHARMACOLOGY AND THERAPEUTICS.

A CORRESPONDENT writes:—"The present position of pharmacology and therapeutics is undoubtedly unsatisfactory. It is difficult to over-estimate the importance to the community of investigations into the physiological action of remedies, and yet so much opposition is displayed towards workers in this particular branch of science that few care to engage in it. As a matter of fact, English pharmacologists constitute a very small body, and their number is becoming daily more and more limited. In Germany, and on the Continent generally, the subject attracts the greatest attention and its importance is fully recognised. The expense of a research is no light matter, and if the publication of a paper, however able, subjects its author to contumely and reproach, it is hardly to be wondered at if the younger members of our profession turn their attention to more lucrative fields of investigation. What is wanted is some kind of official recognition, and until this is forthcoming we must be content to obtain our information on the action of remedies second-hand from other nations, who are not so backward in recognising originality and talent and in adequately rewarding it."

TYPHOID MORTALITY IN MUNICH.

IN a lecture recently delivered by Dr. von Ziemssen on the mortality from typhus abdominalis in Munich, he exhibited diagrams showing the immense improvement that has taken place since the city has been supplied with a good system of drainage and sewerage, and since the establishment of various other important hygienic reforms. The average annual mortality in the hospital from typhoid from 1865 to 1880 was seventy-one, while that of the last five years was only ten. From these hospital statistics a calculation was made that during the last five years the number of persons in the city annually attacked by typhoid has been 1830 less than it was in former years, the number of deaths from the same cause being annually 213 less. The learned lecturer proceeded then to estimate the saving effected to the public, reckoning the average loss caused by an attack of typhoid as fifty days' labour at half a crown a day. He thus obtained the considerable sum of £11,437 as saved in the five years; and was therefore able to point out that citizens who had made great sacrifices for the improvements had already received great benefits thereby, not only in the way he had mentioned, but in many others besides, and he went on to insist on the necessity for the adoption of still further and more perfect sanitary measures.

THE INFANT KING OF SPAIN.

ACCORDING to *La Lanceta*, Dr. Sanchez Ocana, the physician to whom is entrusted the honourable and responsible duty of attending the infant King of Spain, has interviewed no less than twenty-seven women for the purpose of choosing a wet-nurse for his youthful Majesty. It seems to have been decided before the birth took place that the Royal mother was not to be allowed the natural privilege which is properly so prized by most mothers of lower degree—would that we could say so of all! But where Royalty sets the fashion, what wonder is it that others, with no public or extra domestic duties whatever to attend to, and so entirely without excuse, hasten to depute the mother's duty to a stranger.

PSYCHIATRY IN SPANISH UNIVERSITIES.

IN *La Independencia Médica* an earnest appeal is made to the Government by Dr. Valentí y Vivó, Professor of Forensic Medicine in Barcelona, to found chairs of Psychiatry or Mental Pathology in the Spanish universities. At present, he says, the only instruction the students receive on the subject of mental diseases is that which is contained in the lectures on therapeutics, pathology, hygiene, and forensic medicine; but a great deal more than this is required, and he hopes that a ministry which has already shown itself disposed to further matters connected with public health will not refuse to consider the importance to the State of having a body of physicians well trained in the science of mental pathology.

"BAUNSHEIDISM"

"BAUNSHEIDISM" is common enough in Eastern Europe, though fortunately but little known here. This consists in making a number of punctures with needle-points by means of a perforated plate and a corresponding instrument set with points, a strongly irritant oleaginous liniment of secret composition being subsequently rubbed into the skin over the punctures. This mode of treatment is sometimes beneficial in cases of chronic muscular pain of rheumatic origin; but when ignorantly used for any and every kind of pain, as it sometimes is, a good deal of harm frequently results. Thus, a Warsaw surgeon has lately reported two cases in which gangrene of a serious nature resulted from this kind of treatment. In one case amputation had to be performed.

SCALDING OF LUNATICS.

CRUELTY to lunatics by the carelessness of attendants is a very common cause of complaint, for which far too frequently for justice, though perhaps not often enough for expediency, the superintendents of asylums are held responsible. It has been said by experienced administrators that it is easier to govern a colony of madmen than to keep attendants up to their work or "be even with them" in the matter of duplicity and the needless and cruel coercion of the poor mind-sick folk entrusted to their care. One of the common "accidents," as they are mischievously called, which

befall the inmates of asylums is to be scalded, so that they die, in the baths to which they are forcibly subjected. The neglect shown in this particular is altogether inexcusable, and it is most desirable that this should be recognised. Such injuries as the fracture of ribs and the breaking of arms and legs are usually the outcome of bad temper, but the scalding of patients is a fruit of idleness or inattention, for which not a particle of apology can fairly be offered. An irritable or ill-tempered attendant is an anomaly; a lazy or a thoughtless one is a monstrosity, which ought not to be allowed to exist.

THE JOHNSON TESTIMONIAL.

AT a meeting recently held at King's College it was decided that a testimonial of a personal nature should be presented to Dr. George Johnson in recognition of his services to the hospital, on the occasion of his resignation of the Professorship of Clinical Medicine at the College and of the office of Physician to the hospital. An influential committee was appointed, and a lengthy list of subscribers has already been received. Dr. Johnson has given instruction to many generations of students, and, without doubt, many of those who have profited by his counsel and teaching will be glad of an opportunity of showing their appreciation of him. The treasurer of the fund, to whom subscriptions should be sent, is Professor Robert Bentley, 38, Penywern-road, Earl's-court, S.W.

THE LEICESTER ANTI-VACCINATIONISTS.

THE opponents of vaccination at Leicester grow more hardy in their defiance of law. "Home rule," like small-pox, is contagious. It is, by the action of the Government, in the air. If good for Ireland, why not for Leicester? Why should Leicester pupil teachers be revaccinated when the public opinion in Leicester is against vaccination? The Education Department has displeased some of the wise people of Leicester by applying the law of the land against two such pupil teachers. It is refreshing to see that the Government still recognises its responsibility as a central authority for enforcing, not the law of Leicester, but the law of England. We have no doubt there are many sensible pupil teachers in Leicester to be found who will comply with the law.

THE NEW SYDENHAM SOCIETY.

THE members of the New Sydenham Society will receive in the first volume for the current year a valuable contribution to the literature of one of the most important subjects of the day. The volume in question, of which we have had an early copy, has been edited by Mr. Watson Cheyne, and consists of selected essays on various topics connected with micro-parasites. It includes typhoid fever, erysipelas, tuberculosis, leprosy, rabies, actinomycosis, and many others, bringing each subject up to the present level of our knowledge. It is illustrated by a series of lithographic plates. The volume forms a fitting sequel to Koch's Memoirs on the Infective Process, which were published by the Society some years ago. It will be welcomed by many readers.

KLEPTOMANIA.

A WELL-MARKED case of kleptomania turned up at one of the Glasgow police-courts a few weeks ago. It was shown that the accused person, (a lady of independent means) had stolen two silk handkerchiefs from a warehouse in the town. The defence offered was a plea of kleptomania, in support of which a specialist testified that he had attended the accused for puerperal fever—a disease which, it was now known, was occasionally followed by this particular form of mania as one of its sequelæ. The same patient two months ago had purloined an instrument belonging to him, had hidden it under a pillow, and then assisted him actively in the search for it. He had had two similar cases. The plea of mental aberration and non-responsibility was sustained, and the accused was found not guilty, as it was impossible to say that she had "wickedly and feloniously" stolen the articles mentioned.

UNVEILING OF THE STATUE OF JOHN HUNTER.

ON Saturday (this day) the statue of John Hunter, presented by the Queen, will be unveiled in the Oxford University Museum. A short address on the Character and Work of John Hunter, with special relation to the effect of his labours on surgery and medicine, will be delivered by Sir James Paget, Bart., D.C.L., in the lecture-room of the museum. The statue will then be unveiled in its place in the court, and presented to the University on behalf of Her Majesty by Her Royal Highness the Princess Christian. All members of the University in their academical dress, and persons introduced by them, will be admitted. Any graduate may be accompanied by one friend. The address will commence at 2.30 precisely, when the doors will be closed.

PATHOLOGY OF SCURVY.

SCURVY being unfortunately a somewhat common affection amongst certain classes in Russia, papers on the subject frequently appear in the medical press of that country. In a recent account by Dr. T. Stazevich in a Moscow journal of eighty-six cases he had the opportunity of studying last summer, some attempt is made at elucidating the pathology of the disease. The writer made a careful microscopical examination of the tissues, and found in all cases he had the opportunity of observing an extensive degeneration of all the organs, and especially of the voluntary muscular tissue, which scarcely contained any really normal fasciculi; the bloodvessels were not greatly altered. He does not consider the petechial rash as due to capillary extravasation, but looks upon the spots as local hæmorrhagic inflammations. In the blood a large number of stellate corpuscles were found. The conclusion come to is that the disease is a "form of septic poisoning."

STREET COLLECTION FOR HOSPITALS.

MR. GEORGE R. SIMS writes to the *Daily Telegraph* complaining that his coachman, driving a hansom cab in which he himself was, nearly came to grief on a recent Sunday in Oxford-street through the noise of a brass band heading a procession which was making a collection for neighbouring hospitals. The fright of the horse was completed by a lad approaching the horse with a long pole with a money box at the end of it and shaking the coppers. The horse bolted and soon fell on the greasy wooden pavement, fortunately without killing anyone. Apart from this accident, we cannot admire this mode of raising money for hospitals. The intention is kind. The method is noisy and disturbing altogether out of proportion to the results. The friendly societies should leave the streets to the Hospital Saturday Fund, and find some other way to raise money for institutions by which their members so largely benefit.

VACCINATION BY UNQUALIFIED ASSISTANTS.

A PRACTITIONER at Liverpool, has been summoned before Mr. Raffles at the instance of the Vaccination authorities in London for having given improper certificates of vaccination. The gentleman in question has two dispensaries, which are attended by an unqualified assistant. This assistant was ascertained to have vaccinated children, and represented himself as the practitioner who signed the certificates. He

(the latter) justified this by saying that the public vaccinator used to act similarly in regard to children that he, the practitioner (when unqualified), vaccinated, and that he believed every professional man in Liverpool did the same. We agree with Mr. Raffles in condemning this practice, both on moral grounds and on the ground that vaccination ought to be performed only by responsible and qualified medical men.

ALLEGED CURE OF HYDROPHOBIA BY SWEATING.

THE report from Odessa of a case of cure after the onset of what are said to have been unmistakable symptoms of hydrophobia in a boy lends some encouragement to Buisson's mode of treatment to which we have alluded (THE LANCET p. 655). The symptoms of the malady began seventeen days after the receipt of the bite from a dog authoritatively stated to be rabid. The boy, at once removed to the hospital, was placed in a warm bath, the temperature of which was rapidly raised to 42° Reaumur (125° F.). At this stage the boy became unconscious and continued so for one hour. He was taken from the bath, swathed in cloths, and placed in a room at a temperature of 68°. The same process was repeated in the evening and twice a day for the following three days, when the patient's appetite was fully restored. So far the boy has remained well.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of April, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies contained in every case, excepting that of the Chelsea Company, more organic matter than in the previous month's samples, although the proportion is not in excess of what is usual at this season of the year. The water drawn from the Lea and supplied by the New River and East London Companies contained less organic matter than any of the Thames waters. All the samples were clear and bright. The number of micro-organisms discovered in the filtered water was in every case considerably less than in the March samples.

SEVERAL inmates of some workmen's dwellings in Högmarsö, a village near Stockholm, having been attacked with rigors and convulsions followed by cough and severe gastric pain, causing extreme prostration, and the nature and cause of this outbreak being very obscure, the "provincial medical officer" has received instructions to institute an examination into the circumstances, and to furnish a report for the guidance of the authorities.

TELEGRAMS from New York announce the death of Dr. Dio Lewis, the well-known physician. He was born at Auburn in 1823, and was educated at Harvard Medical School. Dr. Lewis deprecated the use of drugs, and advocated the introduction of physical exercise as a part of public education. He was the author of several works on hygienic subjects.

A LEGACY of some £15,000 has been left to the Jena University to be applied in zoological research on the basis of Darwin's evolution theory. The testator is Herr Paul von Ritter, of Basle, who believes the teaching of Darwin to be the greatest sign of progress which the century has yet given.

AT a meeting of the American Surgical Association held in Washington on April 30th, 1886, Sir William Mac Cormac was elected an Honorary Fellow of the Society.

ODONTOLOGICAL institutes are to be added to all the Prussian University establishments. At present Berlin is the only one that has such an institute. The next to be arranged will be in Breslau.

CHOLERA is reported to be increasing in the South of Japan.

UNIVERSITY OF LONDON.

AN extraordinary meeting of Convocation was held on the 25th inst., Dr. F. J. Wood, Chairman of Convocation, presiding.

Mr. MAGNUS moved that the report of the special committee appointed on Dec. 8th, 1885, be received. He said that the report was not the expression of the views of any one member, but of the whole committee; and contended that it was based upon resolutions passed by Convocation long before the idea of a Teaching University was started. The scheme involved the affiliation of provincial colleges, which was a distinct gain, there being no reason why the university should be restricted to London.

Mr. MAGNUS then moved the following resolution:—"That Convocation approves of the admission of certain educational institutions having one, or more than one, faculty of university rank as constituent colleges of the University, and agrees with the proposals relating thereto contained in Section 4 of the subjoined scheme." (See THE LANCET, May 22nd, p. 994.) He cited the Vice-Chancellor's remark that in any change in the University it should seek to add to its useful functions, and not to take away from them. It had long been felt that the teaching institutions of London should be more closely united, and this would be effected by bringing them into connexion with the University. He warned those who desired to set up another university in London and who might oppose the present scheme, and believed that the majority of members of Convocation would affirm the value of the reform.

Mr. ANSTIE, Q.C., seconded the resolution.

Mr. T. TYLER objected that the scheme introduced a new department of the University, which hitherto consisted of fellows and graduates, and would now contain "constituent colleges" also. He also asked what was meant by colleges of "university rank."

Dr. MOXON was astonished not to see any of the supporters of Lord Justice Fry's scheme opposing the present one. But he did not think this reform would meet the views of those who advocated a Teaching University—i.e., an institution where the aptitude and training of a man could be estimated as well as his knowledge tested. He had however, no objection to the scheme so far as it went.

A MEMBER pointed out that the University of London was founded on broader ideas than that of a local teaching university. It was meant to be open to all comers; and he thought it should retain its universal character; but at the same time there was room in London for a great teaching local university.

Mr. HANHART objected that the sections of the scheme were not being discussed in due order, and moved as an amendment that the words "affiliation to the University" be substituted for "admission."

Mr. BROWN seconded the amendment.

Dr. CURNOW supported the resolution, but did not think it went so far as the Teaching University proposals or as Convocation had itself desired. It might be accepted as an instalment; but the next resolution was one which should be amended.

Messrs. LYNN and ELLIOTT supported the amendment.

Dr. SYLVANUS THOMPSON explained the reasons for taking the scheme in the order of the resolutions, and said that the word "admission" was used in a general sense.

Dr. SANSOM thought the tendency of admitting colleges would be to lower the value of degrees. There was room for another university in London, which should grant degrees equal to those of other existing universities, if not so high as

the University of London. He urged that nothing should be done to depreciate the degrees of the University.

Several other members spoke, one of them averring that it would not meet the views of the Teaching University, nor satisfy the requirements of University and King's Colleges.

Mr. MAGNUS, in reply, said that the proposal of the Colleges of Physicians and Surgeons to grant degrees was quite apart from this question.

The amendment was lost.

Another amendment, moved by Mr. TYLER and seconded by Mr. LYNN—viz., "That Convocation approves of the revision of the list of institutions in connexion with this University, with a view to such institutions being brought into closer relation with the University"—was negatived, and the original resolution put and carried by a very large majority.

Mr. MAGNUS then moved, "That Convocation approves of the establishment of a Council of Education as a part of the University, and of the proposals for giving effect thereto contained in Section 5 of the subjoined scheme."

This was seconded by Mr. ANSTIE, and after a brief discussion, interrupted by a motion to adjourn the House, was carried.

The House was proceeding with the next resolution—viz., "That Convocation approves of the proposals for the constitution of the Senate of the University contained in Section 2 of the proposed schema,"—an amendment to introduce the Institute of Civil Engineers having been rejected, when the adjournment took place until June 29th, the day fixed for nominations to the Senatorial list.

THE GERMAN MEDICAL CONGRESS.

(*Concluded from page 948.*)

A DEBATE upon the "Treatment of Syphilis" was opened by Professor KAPOSI (Vienna), who said that it had not made equal advance with our knowledge of the pathology of the disease. Mercurial inunction—now, as four centuries ago—remained the most reliable treatment; and the only notable gain to treatment since the first half of the sixteenth century was the introduction of iodine in the middle of the present century, and, as regards the administration of mercury, the rational use of inunction and the subcutaneous injection of the drug. The *laisser aller* principles of the treatment of syphilis held by the Broussais school, and the erroneous doctrine which attributed late manifestations to mercurialism, were briefly combated. Syphilis must be regarded as a curable disease, one of the most curable of all the infective constitutional maladies, for we possess remedies and methods which act directly and powerfully upon the local lesions, as well as on the general blood disorder. It is much to be desired that the experience of practitioners should be periodically collated so as to establish a common understanding on the value of any special line of treatment. The first question raised was, *Does treatment of the initial forms prevent general infection?* This question may be discussed alike by those who hold the unitarian doctrine that every kind of primary lesion may be the starting-point of general infection, and by the dualists, who assign this part solely to the typical sclerosis. If, with von Bärensprung, the sclerosis (hard chancre) is regarded as a symptom of actual constitutional infection, then the question of abortive treatment falls to the ground; but if the probably truer view be held—viz., that the specific virus is limited for a time to the primary lesion, and is thence conveyed to the tissues by the lymphatics and blood-vessels,—then, theoretically, this absorption might be prevented and constitutional infection guarded against. The methods theoretically and practically possible to effect this object are threefold. In the first place, the virus may be destroyed at the seat of inoculation, as by cauterisation or excision of the primary sore. The non-development of syphilis following such treatment cannot be taken as positive evidence of its effectiveness, because every sclerosis is not necessarily followed by syphilis, and because the truly syphilitic nature of the primary lesion rests on the testimony of the surgeon who excises it. Nor is there any means of determining a period when the excision of the local lesion may be successful. Again, the presence or absence of glandular swelling does not suffice to determine the syphilitic nature of the lesion. If Lustgarten's bacilli could be trusted as a test for syphilis the nature of a primary sore might be determined. Practically, excision is easy enough when the sore is preputial; but it can be less thoroughly practised when this is seated on the glans or sulcus coronarius. In the second place, systemic infection may be prevented by interrupting or closing the path of absorption, which it has been professed to effect by division of the dorsal lymphatics, and, if desired, by excision of glands. This is a very naïve proposition, for injected preparations show that the whole penis lies embedded in a dense meshwork of lymphatics. In like manner the value of mercurial and iodic injections into the primary lesion to destroy the virus during absorption may be discarded. In the third place, there is the abortive treatment. Is it not reasonable to employ systemic treatment early in every case when the specific characters of the primary lesion are manifest? Although this may be rational and humane—for it is, theoretically, imprudent to suffer a disease to attain its full intensity before commencing to treat it,—yet, practically, it is not of much use. Experience teaches that the outbreak of general symptoms is not prevented by such early treatment, but only postponed; that the symptoms then follow a disorderly and atypical course; and that generally there appear, not merely mild exanthematic affections, but very early severe symptoms—e.g., periosteal. Therefore, in his experience, it is unnecessary and injurious, as well as perplexing, to the practitioner to attempt systemic treatment before the clear manifestation of constitutional symptoms. It is wiser to allow the disorder to develop, and to defer treatment until the first appearance of roseola. The second question raised was *the relative advantages of anti-syphilitic remedies with reference to the pathological phenomena.* The answer to this depends upon establishing a principle upon which to estimate the activity of a remedy or method of treatment, and to critically survey such methods. The activity of a drug is estimated by the promptitude with which its employment results in the disappearance of visible and palpable phenomena, and in the freedom from relapse. On the latter point, in which the cure of syphilis solely consists, judgment is difficult. Hospital patients are discharged as soon as external visible symptoms have disappeared and only a small proportion come again under treatment, and are available for statistics, which are therefore worthless. It is only in private practice that information as to the cure of syphilis can be gained, and here no statistics are available; Prof. Kaposi summed up his experience by saying that there are many patients who remain cured after a single course of a few weeks' or months' duration; but there are many who undergo one or several relapses before being cured; and, finally, that in a small number who have been free from symptoms for years, and have procreated healthy children, relapses of syphilis—cutaneous, cerebral, and other—may arise. It is quite impossible to fix a limit to the time over which a drug may be administered. The occurrence of relapses tells nothing either for or against the value of a drug; for relapses may occur under the most favourable conditions. It is desirable that after a sufficient treatment several months should be passed without any symptoms; and the disappearance of polyadenitis must be borne in mind. The remedies known to be most active are—(1) mercury, (2) iodine, and (3) vegetable decoctions[1] (*holz-tränke*); to which may be added the so-called after-cures, as sulphur and sea baths; and, lastly, Fournier's protracted plan. Mercury can be introduced into the body in many ways, the most important being inunction with grey mercurial ointment. As the absorption of the drug depends on the fat with which it is mixed, lanolin alone is useless as the basis of an unguent. Empl. hydrargyri is less efficacious except for the local treatment of gummatous infiltrations. Sublimate baths are of use in infantile syphilis, and in adults in cases of extensive ulcerating gummata. The introduction of the hypodermatic treatment by Lewin has been of great service; it is more exact and direct than any other mode of administration, and a large number of mercurial preparations may be administered by its means. These preparations vary in their efficacy as well as in their liability to produce local

[1] Sarsaparilla mainly.

lesions, and Prof. Kaposi concurred in the following scheme drawn by up Bockhart to classify the various preparations:—

1. Mercurial preparations of markedly durable action—
   (*a*) Inunction (Neapolitan ung. hydrag.).
   (*b*) Calomel injections. } Subcutaneous.
   (*c*) Lewin's sublimate solution. }
2. Mercurial preparations of moderately durable action—
   (*a*) Sublimate; chlornatrium. } Subcutaneous.
   (*b*) Albuminate and peptonate of mercury. }
   (*c*) Blood-serum—mercury. }
3. Mercurial preparations of slightly durable action—
   (*a*) Mercury bicyanate. }
   (*b*) " glycocoll. } Subcutaneous.
   (*c*) " formamide. }

The least painful of these is the formamide. Internally, sublimate, calomel, and tannate of mercury are useful, the last especially producing but little effect on the stomach; also protiodide and biniodide, which are more frequently prescribed in France. Professor Kaposi thinks that mercury should be given in all forms of cutaneous affection in the early period, and in the late period for diseases of bones, of parenchymatous organs, and of the cerebro-spinal system in acute stages; whilst iodine is preferable for joint affections and syphilitic cephalalgia of the later stages. The more resolute and prolonged the treatment of acute affections, the more certainly may relapses and a protracted course be avoided. He therefore advocates inunctions where possible, and failing them injections of the more durable agents, less active medication being reserved for those late forms which are not of urgent nature. The more serious affections—as iritis, ulcerations of the naso-laryngeal tract, and affections of the brain and spinal cord—must be treated actively by inunction. Mercurial treatment never gives rise to sequelæ so long as it is carefully given. Iodine is useful in bone and joint affections, especially for nocturnal pains, and also for the symptoms of the gummatous period. In the early stages iodine should never be prescribed alone for fear of protracting the disease, and it is a mistake to suppose that iodine corrects the abuse of mercury. The "decoctum Zittmani" is useful in late forms, especially of ulcerations of the throat and skin, and may be combined with inunctions. It is preferable to the "decoctum Pollini," which injures the appetite. The after-treatment by sulphur baths, hydropathy, &c., has no specific action. The third question dealt with by Professor Kaposi was *how long and how often should anti-syphilitic treatment continue?* In general, the first treatment should be carefully pursued for a long time, and then only repeated as often as the symptoms of syphilis recur; when there are no signs, treatment is superfluous. But a rational course of treatment can do no harm, and there is nothing to urge against its occasional repetition within the first year; but in deciding upon the need of this the practitioner must deal with the individual case. Besides the constitutional treatment, local measures are in many cases needful, such as ulcerations of the nose, pharynx, and larynx.—Dr. NEISSER, who followed, spoke of the numerous differences which still obtain among practitioners in the treatment of syphilis; but he would not abandon the hope that in the future, by means of careful and critical analysis, more certain principles would be established. The experience of single individuals needs to be corrected by the sum of the experience of many, and in this direction much might be done by collective investigation. With this object he directed attention to the following points: Is it possible to prevent the outbreak of syphilis by removing its primary effects? Ought the constitutional disease to be attacked with remedies, or should it be left alone? What plan can be established for a treatment which may be generally accepted? Each of these questions he discussed in turn. 1. That syphilis is a bacterial disease may be now generally accepted, the Lustgarten-Doutrelepont discovery being a distinct advance; but the important question of the time and manner of the dissemination of the microbe from the seat of infection cannot be determined by experiment, since syphilis is incommunicable to animals; it must be decided clinically. We are unable to base our treatment on pathological knowledge, but the results of treatment may help to solve the pathological problem. In most of the published cases excision of the primary lesion has had no result; some have remained healthy. Negative results are open to the objection that the operations were not radical enough or were deferred too late, and positive results may be ascribed to the fact that they were not cases of actual specific lesions. Further investigation is needed, for it may be taken that in a great number of cases the virus remains for a long time at the seat of infection, and therefore may be removed, especially if attacked early enough. Results may be uncertain, but no harm can come of excision, which is the best local treatment. If excision be not practised, then cauterisation by strong carbolic acid is to be recommended. 2. He agreed with Kaposi that, once constitutional syphilis is declared, the best remedies are mercury and iodine, without forgetting attention to hygiene, diet, &c. Mercury should be given as soon as the diagnosis of syphilis is established, for although the course of syphilis is not cut short its intensity will be diminished. Syphilis, if untreated, may pass on to recovery; but far more often it leads to destructive processes, as the history of endemics teach. There is no sure ground for prognosis or the estimation of the later course of the disease from its early stages. In every case left untreated the possibility of tertiary manifestations must be borne in mind. But the action of mercury being directly antidotal, it is obligatory to give it, although under slight necessity, on the chance of mitigating severe symptoms and to effect a cure. He agreed with Fournier's plan of commencing treatment as early as possible, often before the appearance of a rash. He did not think such early treatment harmful; but its value or inutility as a prophylactic must be regarded as an open question. 3. He also agrees with Fournier in prolonging treatment for three or four years, a chronic disease requiring to be treated chronically; and for this purpose the continuous administration of small doses may be intermitted with larger and more active ones. The choice of a drug is less important than the amount of mercury administered, and it is wrong to adhere to one remedy or one method. As a rule treatment should be active at first, and at any recurrence, the intervals being available for iodide of potassium or milder mercurials. The various methods of mercurial inunction may be successively combined, so as to bring as many lymphatic gland regions under its action as possible. Baths, "drink cures," "sweating cures," pilocarpine, and wood decoctions are only to be regarded as aids to specific treatment. Iodine holds an intermediate position, having in the later stage a specific action. It is indispensable, but is generally given in too small doses. Even children will bear very large doses. There is no essential difference between the iodides of potassium, sodium, and ammonium. It is questionable if iodoform given internally or subcutaneously is of any service.—Dr. WEBER (New York) spoke of the prevalent methods in America. A notable feature is the early administration of iodide of potassium, even at the beginning of the secondary stage; and of much larger doses in all stages than in Europe. Duhring and Keyes have shown that large doses are borne very well, taken in soda-water or milk. Mercury is generally given on the French plan—the protoiodide internally, and yields good results. The use of Zittman's decoction is little in favour; indeed, of late years a large number of vegetable fluid extracts (mostly derived from the Indians' armamentarium) have been introduced, but Dr. Weber was unable to report any favourable results.—Professor v. ZIEMSSEN (Munich) said they required observation and statistics of cases treated on one plan for comparison, and the deduction of the relative value of various methods. He was satisfied to prescribe the subcutaneous administration of bicyanate of mercury, and had seen good results follow the combined use of that preparation and of iodide of potassium in visceral and cerebro-spinal syphilis.—Dr. SCHUSTER (Aix) remarked on the excretion of mercury.—Dr. ZIEMSSEN (Wiesbaden) advocated the separation of patients from their families, and their treatment at health-resorts.—Drs. EDLEFSEN (Kiel) and LEUBE (Wurzburg) commence treatment as soon as the syphilitic nature of the chancre is established. Inunctions are more lasting, injections more rapid; and care should be taken in the administration of large doses of iodide of potassium.—Dr. BAUMLER (Frieburg) spoke on preventive treatment, and recommended early resort to mercury. Mercury is also indicated in the secondary stage, and iodide of potassium in the tertiary. It was important to look after the nutrition of the patient.—Dr. DOUTRELEPONT (Bonn) strongly advocated calomel injections.—Dr. SCHUMACHER protested against a prolonged intermittent treatment as unnecessarily weakening the patient.—Professor KAPOSI, in reply, said that no unanimity had been expressed, nor could it have been expected, on the therapeutic value of the various methods of administering mercury; and as to preventive treatment, he looked

forward to more information being gained by collective inquiry. He also humorously critised the prevalent plan of treating syphilis by subcutaneous injections as likely to eventuate in rendering it so curable that syphilis wards would no longer be required in hospitals.

Dr. KAHLER (Prague) read a paper on the Experimental Production of Permanent Polyuria. Cases of polyuria following injuries to the skull do not solve the question as to the precise locality of which lesions produce polyuria. Of twenty-two recorded cases, in six the middle parts of the brain were damaged, in four the pons, in two the medulla. Claude Bernard never succeeded in producing permanent polyuria; and his experiments were carefully repeated on rabbits with modifications, the animals being kept on dry food, and the urine strictly measured. By making a deeper puncture than Bernard, and injecting minute quantities of nitrate of silver, a marked and lasting polyuria was excited, although its degree varied spontaneously from time to time. Examination showed that the lesion in such cases involved the posterior part of the pons, and the medulla near the restiform body.

Dr. DEMME (Berne) described a case of Acute Pemphigus in a well-nourished country lad, thirteen years of age, who whilst under observation had seventeen acute attacks, generally accompanied by fever, vomiting, mild delirium, and depression. A characteristic diplococcus was found in the blood, urine, and fluid of the vesicles, in amount proportionate to the severity of the eruption. The vesicular fluid also contained some isolated larger cocci and occasionally bacilli containing spores. Inoculations of pure cultures of the diplococcus were made, with negative result, in pigeons, dogs, cats, and rabbits; but in the guinea-pig intra-pulmonary injections produced fatal pneumonia with great development of diplococci. It seemed probable that acute pemphigus was due to this micro-organism, which he could not detect in pemphigus foliaceus or in syphilitic pemphigus. The case was treated with antipyrin internally and the application of a hydrochinone (1 in 30) ointment, and it eventuated in recovery.

Dr. REHN (Frankfort) exhibited a well-developed girl, twelve years old, who during the first months of life had been twice tapped for simple chronic hydrocephalus.

Dr. RAHL (Vienna) related his experience of Syphilis Hereditaria Tarda, of which he had seen 112 cases. In no case had symptoms appeared before the second year. The most frequent were—bone disease in sixty-two, ozæna in forty-two, and eye disease in thirty-six. Three cases were of special interest, for, having been under medical observation since birth, it was proved that there were no syphilitic manifestations until the seventh, fifteenth, and sixteenth years respectively.

Dr. HEUBNER (Leipsic) read a paper on Scarlatinal Diphtheria, and its treatment by means of parenchymatous injections of a 3 per cent. solution of carbolic acid into the tonsils and arches of the palate with a specially devised instrument. He said that on this plan mortality had fallen from 35·6 per cent. to 13·8 per cent.

Dr. FRIEDLANDER (Leipsic) read a paper on the Typical Course of Articular Rheumatism. He distinguishes two types—one having a maximum duration of seven days, the other of thirteen days. Cases of longer duration were combinations of both types. The maximum temperature is attained on the third or fourth day; and in the course of one attack no joint is affected more than once.

Professor QUINCKE (Kiel) exhibited three distinct forms of Fungus from a single case of Favus, but had not been able to determine whether each variety was equally competent to excite the disease.

Dr. SCHUMACHER (Aix) spoke of Localised Hydrargyrosis and its Laryngoscopic Diagnosis. He averred that mercurialism produced changes in the buccal mucous membrane, resembling those due to syphilis; but, on examining the root of the tongue with the mirror, broad, sharply defined, and characteristic patches may mostly be detected.

Dr. LITTEN (Berlin) related a case of Pyopneumothorax, with Cercomonades in the Pulmonary Tissue. A patient was tapped for pleurisy, after which succussion, but no other sign of pneumothorax, appeared. On a second puncture, there appeared suddenly another sign, elicited on movement—viz., a bubbling râle; and the conclusion was that there was a pleural fistula with valved outlet. Microscopic examination of the exudation revealed cercomonades (monas lens), which were also found in the sputum. The presence of these animalcules has been thought to indicate pulmonary gangrene, but no symptom of gangrene occurred in this case. Tubercle bacilli were, however, once found, pointing to the cause of the pleural fistula.

Dr. FRANZ (Liebenstein) gave an account of cases of Chlorosis cured by the Oertel Method, where iron had been of no service.—Professor LEYDEN, however, warned against overstrain of the heart in chlorosis.—Dr. BREHMER had seen better results in cardiac cases from Schott's gymnastics than from the Oertel cure.

Dr. BLOEBAUM (Coblenz) advocated Galvano-cauterisation in the treatment of Diphtheria. He said it was painless, and was not only destructive of bacterial life but prevented absorption of ptomaines.

Dr. SCHULZE (Heidelberg) read a paper upon Syringomyelia, which was easy to diagnose, producing partial sensory paralysis, with spastic paralysis of the lower limbs. The sensory paralysis may consist of partial analgesia, as in a case where no pain was felt from a broken arm. In a case of cellulitis of the hand, which led to amputation and to fatal pyæmia, the supervention of spastic paralysis of the lower extremities led to a diagnosis of syringo-myelia, which was confirmed post mortem. The etiology of the condition is unknown.

Dr. E. PFEIFFER (Wiesbaden) reported upon the Etiology and Treatment of Uric Acid Calculi. He finds that chloride of sodium waters (as the Kochbrunnen in Wiesbaden) have very little solvent effect on urinary calculi, but that alkaline waters (as Carlsbad) have much more marked action. But in each case, on leaving off drinking the mineral waters calculi form again very rapidly. Lithia water—the artificial being twenty times stronger than the strongest natural—has very slight solvent properties. More powerful is the purely alkaline water of Fachingen, which he recommends should be taken continuously for a long period in cases of renal and vesical uric acid calculi.

At the conclusion of the four days' session, the President, Professor Leyden, thanked the members for their participation in the Congress, especially those who had come from distant countries, as America, Russia, Austria, Switzerland, Holland, and Belgium, and invited all to meet again at Wiesbaden next year.

BURGH POLICE AND HEALTH (SCOTLAND) BILL.

IN addition to the provisions, which we have already noticed, for the appointment of medical officers of health and for the adoption of measures to prevent the spread of infectious diseases, the Bill proposes to confer important powers upon the Commissioners in connexion with the erection of new buildings, the occupation of dwelling-houses, the construction of public sewers, the control of house drainage, and the supply of water. We shall notice a few of the more important of these.

Clause 168 forbids the erection "of any building upon any ground which shall have been filled up with any material impregnated with fæcal matter, or with any animal or vegetable or other offensive matter, which, in the opinion of the medical officer or sanitary inspector, may tend, by decomposition or otherwise, to the prejudice of the health of any future resident or occupier of such building, or of any resident in the neighbourhood, except upon a certificate of such medical officer or sanitary inspector that proper precautions have, in his opinion, been taken to obviate any such result." No new or altered building will in future be permitted to be occupied until it has been certified by the surveyor of the burgh to be fit for occupation and in accordance with the provisions of the Act. The Commissioners are to have power, "after cause shown," to order means of ventilation, approved by them, to be provided in every building, whether erected before or after the application of the Act; and where not already existing, to order, or if necessary to construct at the expense of the owner, such means of drainage as they may consider requisite. The surveyor of the Commissioners is to be authorised, when requested by the medical officer of health or the sanitary inspector, to open for the purpose of inspection any drain or cesspool; if it be found in good order, all the expenses incurred in the inspection to be defrayed by the Commissioners. Provision is made for the

compulsory introduction of water, at the expense of the owner, into every house or part of a house occupied by a separate family, and for fitting up a sink, duly trapped, and, wherever practicable, a sufficient watercloset; the sinks, soil-pipes, and waterclosets to be trapped and ventilated. Every watercloset, earthcloset, or privy must be placed so that one of its sides shall be an external wall, with a window in it of at least six superficial feet and one-half made to open; and the soil-pipes from waterclosets must be kept wholly disconnected from all other pipes except ventilating pipes. The Commissioners are to be empowered to take the necessary measures for obtaining or providing and maintaining, for the use of the borough, an adequate supply of pure and wholesome water, and to make bye-laws, *inter alia*, "for inspecting and periodical cleansing of cisterns erected in buildings for the use of two or more families."

In the building of new dwelling-houses it is proposed to enact that every habitable room on the ground floor shall have a height of at least 9 ft. 6 in. from floor to ceiling; on all other floors except the attics, of at least 9 ft.; and in every habitable attic the height shall be at least 8 ft. through not less than one-third of the area, and in no part less than 3 ft. Every habitable room must have at least one window, the area of the glass of which shall be at least one-tenth of the area of the room, the top of it not less than 7 ft. 6 in. above the floor, and one-half at least made to open. It is proposed also to regulate the occupation of houses by making it unlawful for any owner to let or any person to take on lease any building which, if consisting of one apartment, does not contain at least 700 cubic feet of space if it was used as a separate house before the passing of the Act, or 900 if not so used; if consisting of two apartments, it must contain 1200 or 1500 cubic feet; and if of three apartments, 1800 or 2000 cubic feet. Each apartment must have a window, and the cubic space is to be calculated free of all obstructions. We confess we are unable to see the reason for this distinction between a house "used as a separate house" before the passing of the Act and after it. If the larger space is requisite for the health or comfort of the inmates, it should be imperative in all cases; if not necessary, it is unjust to require it. We presume it is a concession to some supposed vested right, but no such right ought to be permitted if inconsistent with the public health. Rules are laid down for the regulation of common lodging houses with a view to promote health, cleanliness, and ventilation, and to prevent overcrowding. Every keeper of such house is bound under a penalty to report if any lodger has been confined to bed or affected for twenty-four hours with any infectious illness.

Such are some of the more important points bearing upon public health. The Bill will confer great powers upon the Commissioners, and necessarily also great responsibility. If these powers are exercised firmly and judiciously we cannot doubt that the Bill will have an important bearing upon the lives, the health, and the comfort of the inhabitants of the burghs to which it is applied. We trust that in committee it will be amended as regards the annual appointment of the medical officer of health, the verification of the diagnosis of qualified medical practitioners who report cases of infectious disease, and the distinction drawn between houses occupied as separate houses before and after the passing of the Act.

THE MALARIA PROBLEM IN ITS LATEST PHASE.

IN THE LANCET of the 10th ult., p. 708, we announced that Dr. Schiavuzzi had presented to the Roman Accademia dei Lincei some microscopic preparations made with cultures of a bacillus found by him in the malarious atmosphere of the regions around Pola in the Istrian Triangle. Now, according to Professor Tommasi-Crudeli, although the bacillus in question in Dr. Schiavuzzi's preparations assumes forms identical with those of the bacillus malariæ, it is by no means certain that the two bacilli are one and the same micro-organism. The configuration alone is not sufficient to characterise the bacilli of the various infections, it being well known that the comma bacillus of Koch, believed at first to be the unvarying principle of cholera, is found identical in patients and localities where no shadow of cholera exists. Micro-organisms, quite undistinguishable as to form, may be malignant or innocuous, so that recourse must be had to experimental proof from cultures made *ad hoc* to determine whether the bacilli can cause specific infections or not.

Another question yet awaiting solution is that of the nature of the alterations wrought by the malaric infection on the blood-globules. Our readers are familiar with the results of Laveran's researches, as well as of those of Drs. Marchiafava and Celli on this subject. By the malaric infection the colouring matter of these globules turns from red to black, being converted into a substance called melanine, while the interior of the globules is at the same time invaded by a substance called hyaline. Laveran attributed these alterations to a living organism which penetrates the globules; while Marchiafava and Celli, to whom belongs the merit of having first thrown light on the alterations in question, observed that the hyaline substance possesses a certain motility, and inferred that it was a parasite to which the destruction of the blood-globules is due; and as after the globule is destroyed the hyaline substance divides into a granular débris, they ascribed to these granules the reproduction of the parasite. Similar conclusions were reached by Golgi, who supported the parasite theory by the observation that in the globules, before their transformation into granular débris, there is visible a fragmentation (*frammentazione*) which divides the globule itself into fine segments. Now, Professor Tommasi-Crudeli holds that the phenomena described by Marchiafava, Celli, and Golgi have not been justly interpreted by these observers. Already, in 1884, at the Copenhagen Congress, he explained the alteration of the red globules as a degeneration of their protoplasm determined by a morbigenous agent, and not a development of an animal parasite. Indeed, the movements encountered in the hyaline substance which invades the globules, and advanced as proof of the presence of the parasite, have little value, if only for the reason that in many blood diseases, and as the result of a heightened temperature, the protoplasm undergoes alteration and acquires a more or less marked motility. So also the degenerations described by Golgi as a fragmentation, by which the parasites are reproduced, are encountered in analogous degenerations caused by violent agencies, as by an electric discharge, or by treating the globules with certain saline solutions. On the other hand, no one has ever seen the granulations in process of conversion, step by step, into the parasite, nor can any trace of this last be found in the air or in the soil of the malarious localities.

But there are yet other considerations. What we in these days know of the progressive infection of organisms excludes the notion that it depends on an animal parasite. On the other hand, we have numerous examples of infections produced by vegetable parasites. The malaric infection presents such a variety of forms, from the slightest to the most acute, and there are such intervals of time between its attacks, as no animal organism hitherto known could be capable of producing. Moreover, the improbability of the animal nature of the parasite is proved by the property inherent in the malaric ferment of remaining buried for centuries without losing any of its pernicious qualities, so that (and Rome supplies examples every day) one excavation or disturbance of inert soil to a certain depth suffices to liberate the ferment and to make a locality, till then innocuous, the scene of a febrile explosion. We know that the seeds of plants can preserve intact their peculiar germinative power, even after being buried for centuries, like the grain found in the coffins of Egyptian mummies. So, also, the cutting of a tract of soil in a deserted neighbourhood, through the exhumation of seeds hidden in the earth, can all at once develop an unwonted flora. But nothing of this sort, insists Professor Tommasi-Crudeli, has ever been observed in the case of animal organisms; and therefore he reasserts his opinion that the malaric ferment is constituted by a vegetable, or, in his own language, a schizomycete (*σχίζω*, divide; *μύκης*, a fungus). "The tendency to precipitate conclusions," he adds, "from limited research leads to erroneous interpretations, and can only postpone the solution of a problem so complex as that of the malaric ferment—a problem which must be approached not by an isolated observation, but by the concurrence of a multitude of facts and their verification by experiment."

DR. RICHARDSON'S LECTURES ON ANIMAL OR VITAL MECHANICS.

METHODS OF NATURAL CONSTRUCTION.

THE third lecture of the above course, delivered on Monday, the 17th inst., opened with illustrations of natural constructions in comparison with certain others produced by man. The jointing of bone by the suture was compared with the dovetailing of mechanical art; the fabrics woven by Nature with those woven by man; the vibrating drum of natural formation in the tympanum with the drum and vibrating screen of human design; the natural osseous column with the column erected by the architect; the tubular system of the arteries with the tubular arrangements of human invention for the conveyance of water and other fluids; the sacs or pouches in some animals for water carriage, as in the camel, with the water-holders of human make; the eye as a camera, and the common camera now in such ordinary use. These were all, practically, the same as means for particular ends; and these having been illustrated, the subject was varied in order to introduce details of methods of construction, with comparisons and distinctions between the works of Nature and man. 1. Nature and man go to the same markets for their primary materials. Neither of them works without proper materials, although Nature is able to work with fewer than man, and man often takes structures, such as cotton, which Nature has prepared for him, and applies them to his mechanical purposes. Man also possesses an advantage in that he can bring together his materials from a distance, while Nature only produces at points where the required materials are at hand and ready for application. 2. Nature as well as man requires for her work certain preliminary conditions for construction besides material—that is to say, constructive forces: proper attractions and repulsions, correct degrees of moisture, of temperature, of pressure, of light. These imperfect or unsuitable, the work in both cases is imperfect or wanting in adaptability. Even Nature's crowning work, the highest order of animal construction, the human body, is rendered imperfect if the required conditions are not duly represented. 3. The mechanical works of Nature, like those of man, wear out, but not precisely in the same way. Some parts, those which are elastic, wear out in a manner extremely similar, but Nature seems to have a more systematic destiny for her work than man has for his contrivances. Nature has five successive stages: one of development, a second of maturity, a third of maintenance, a fourth of decline, and a fifth of dissolution. These stages were traced out, and the theory of Flourens, indicating the period of maturity in animals and the multiplication of that period by five for the period of dissolution, was described—man, who had assigned to him twenty-one years as his period of maturity, having 105 years as his period of dissolution, or completed anatomical age for death, and the death taking place, under such fulfilled ordination, from failure at the breathing surface and from a process of anæsthetic sleep. The works of Nature thus grow out of existence, while those of man shake or vibrate out. 4. Natural works as well as human are subject to wear and physical accidents, and both are made to undergo repair, in which work of repair Nature is often most skilful, though she may require directing, as in the case of a broken bone, where she brings together the broken ends, and for a time supports them by an extra deposit, called by the surgeon the callus, which, when it has served its purpose, becomes reduced or passes away altogether. In treating of the wearing out of natural parts, Dr. Richardson was not in favour of the common idea that every part of the body is renovated and replaced by absolutely new material in a limited number of periods—say of seven years—during life. He showed a scar on his own hand from an accidental wound, and which had been there nearly fifty years, as indicating permanency of structure. He referred to memory as proof of the same truth, and he observed that if short periodical structural changes and renovations did really occur, then various diseased organisations, such as disease of the valvular tissues of the heart, ought to pass away and be replaced by new structure, unless diseased structure also reproduced itself. On the whole, he maintained that change was very slow, as slow as life itself, with identity thereby of the *ego*. 5. In her mechanism Nature never traverses laws which man may not. She is not kinder to herself, not less exacting to herself, than to man. She acts in regard to her own mechanism as if she, like man, were obeying a primary power which had provided materials and laid out the conditions. Hence Aristotle had speculated as if in the natural mechanism two powers had been at work, one to give and command, the other to use and carry out by mechanical skill the details of mechanical art. 6. In all the above particulars the works of Nature and of man present much that is in common. When, however, we come to method of work, the difference is as wide as it can be. Nature works from a centre, man works towards a centre; Nature distributes, man concentrates; Nature strikes out or evolves, man brings in and founds or builds. How Nature evolves, and so evolves as to produce perfect organs by coincident growth of parts, formed a striking part of the discourse. Once on this matter all was obscure; now there are some faint lights on it. John Hunter broke ground when, by his experiments on growth of bone, he showed that growth was by deposit from without, attended by absorption from within. Graham broke ground when he divided natural formative structures into colloids and crystalloids, and showed the separation and filtration of crystalline matter through colloidal, with the laying down of the colloidal parts in mechanical order and design. The chemists had broken ground by their proofs that out of inorganic materials they, like Nature, could make organic substances, such as the specimen of artificial urea on the table. The microscopists had broken ground in their industrious labours and discoveries on the subject of natural primary development of structures from cell formation, and on the formation of tissues by the natural arrangement of cells so as to evolve natural constructions. If we could out of the primary elements used by Nature construct a cell that would accrete to itself and give out another cell, the first step of natural construction by evolution would be attained. Without assuming this to be attainable or not, the lecturer passed to a brief description of some recent experiments of his own in micro-electroscopy, from which he explained that by electric decompositions of organic fluids, like blood, he had produced constructions which in many particulars resembled various organic tissues; and concluded with illustrations relating to what he designated "the growth of form" in natural and human combinations.

THE MEDICAL DEFENCE ASSOCIATION AND MEDICAL REFORM.

A MEETING of the Council of the Medical Defence Association was held on the 21st inst., to consider the Medical Bills now before Parliament. Dr. B. W. Richardson, F.R.S., presided. It was resolved: "That, in the opinion of the Council, the Universities of Aberdeen and St. Andrews should each be entitled to send a representative to the General Medical Council, instead of sending one jointly, as provided by the Government Bill." It was also resolved: "That the hon. secretary be requested to convey to Sir Lyon Playfair the above resolution, and to ask if he will receive a deputation from the Association (*a*) in relation to the above; (*b*) on the subject of introducing a clause in the proposed new Act for preventing so-called 'provident dispensaries' being conducted by unqualified persons; (*c*) on introducing a clause relating to the assumption of medical titles." The above resolutions having been forwarded to the Vice-President of the Council, the hon. secretary (Mr. George Brown) has received the following reply:—

"Privy Council Office, May 24th, 1886.

"Sir,—I am directed by Sir Lyon Playfair to acknowledge the receipt of your letter of the 22nd, and to say that the last two subjects referred to therein (the conduct of so-called provident dispensaries and the assumption of medical titles by unqualified persons) are not dealt with by the Bill, of which the scope is definite and could not be enlarged. With regard to the representation of the Universities of Aberdeen and St. Andrews, Sir Lyon Playfair hopes that the question may be decided to-night in committee, in which case it will be unnecessary to trouble your Association to send a deputation on the subject.

"I am, Sir, your obedient servant,

"J. W. MACKAIL."

WILLS OF MEDICAL MEN.

THE will of Mr. John Cooper Forster, formerly President of the Royal College of Surgeons, late of 29, Upper Grosvenor-street, who died on March 2nd last, was proved on the 13th ult. by Mr. Stuart Forster, the son, and Mr. Arthur Edgell Eastwood, the executors, the value of the personal estate exceeding £25,000. The testator bequeaths to his wife, Mrs. Adela Forster, his furniture, books, pictures, plate, jewellery, and effects; and there are some legacies and annuities to servants charged on his real estate. All his freehold and copyhold property he leaves to his wife for life, and then to his said son. The residue of the personalty is to be held upon trust for his wife for life, and at her death as to one-fifth for his granddaughters, Undine and Elsa Emily Dixon, one-fifth for his daughter, Mrs. Jessie Tamplin, and three-fifths for his daughters, Rose and Anna Forster.

The will and codicil of Mr. George Ord, retired surgeon, of Brixton-hill, Surrey, were proved on April 20th by Mr. William Miller Ord, physician, and Mr. George Rice Ord, surgeon, the sons, the executors, the value of the personal estate amounting to over £24,000. The testator leaves three-fifths of his real and personal estate to his son, William Miller, and two-fifths to his son, George Rice.

The will and four codicils of Mr. Francis Burdet Courtenay, surgeon, of 2, Chandos-street, Cavendish-square, who died on March 15th last, were proved on the 3rd inst. by Mrs. Frances Maria Lambert, Mr. Francis Hoare, and Mr. Edward Horseman Bailey, the executors, the value of the personal estate amounting to over £16,000. The testator bequeaths legacies to his daughter, grandchildren, a servant, and others. The residue of his property he leaves upon trust for his daughter, Mrs. Lambert, for life, and then for her children or more remote issue as she shall appoint.

The will of John Fremlyn Streatfeild, F.R.C.S., late of 15, Upper Brook-street, who died on March 18th last, was proved on the 3rd inst. by Mrs. Georgiana Maria Streatfeild, the widow, the Rev. Arthur Benjamin Cotton, and Colonel Robert Champion Streatfeild, the executors, the value of the personal estate amounting to over £14,000. The testator makes some bequests in favour of his wife, his mother, and his executors; his freehold estate at Chigwell, Essex, at Canterbury and Westerham, Kent, and the residue of his real estate, he leaves to his wife for life or so long as she shall remain unmarried, and then he settles the same on his son Thomas. The residue of his personal estate he leaves upon trust for his wife so long as she shall remain unmarried, and then for all his children (except the child who shall succeed to his real estate) in equal shares.

The will and four codicils of Mr. Richard Stocker, late of 29, Upper Montagu-street, Montagu-square, surgeon, who died on Feb. 25th last, have been proved by Mr. John Sherwood Stocker, the son, and Mr. Thomas Dence, the executors, the value of the personal estate amounting to upwards of £7000. With the exception of a complimentary legacy to his executor, Mr. Dence, the only legatees under the will are the testator's sons, Richard Charles Southby Stocker and John Sherwood Stocker.

The will of Thomas Spencer Cobbold, M.D., of 74, Portsdown-road, Paddington, who died on March 20th last, was proved on April 19th by Charles Spencer Waller Cobbold, M.D., the son, and Mr. John Henry Hortin, the executors, the value of the personal estate amounting to over £12,000. The testator gives his leasehold residence with the furniture and effects and £100 to his wife, Mrs. Frances Philippa Cobbold; his microscopic cabinet of entozoa to his said son; all his books on helminthology to the Linnæan Society of London, Burlington House, for the library; and pecuniary and specific legacies to children and others. The residue of his property he leaves to his wife.

The will of John Storrar, M.D., formerly of 113, Ladbroke-grove, but late of Stratheden House, Blackheath, who died on March 10th last, was proved on April 13th by Mrs. Helen Storrar, and Mr. Robert Storrar, the brother, the executors, the value of the personal estate amounting to over £4000. There are bequests to his brother, James Russell Storrar, and his wife, and to his late wife's niece; and the residue of his property he gives to his said brother Robert.

The following legacies have recently been left to hospitals and other charitable institutions:—Mrs. Frances Acton, of 106, Elgin-crescent, Notting-hill, £500 to the Royal Hospital for Incurables, West-hill, Putney.—Mr. Edward Cohen, of 111, Harley-street, Cavendish-square, and of Windermere, Westmoreland, £200 to the Middlesex Hospital, Charles-street, and £100 each to St. Mary's Hospital, Paddington, and University Hospital, Gower-street.—Mr. Richard Henry Vade Walpole, formerly of Upper Brook-street, Grosvenor-square, but late of Suffolk Hall, Cheltenham, whose personal estate amounts to over £185,000, £200 to the Royal Hospital for Incurables, West-hill, Putney; £100 each to the Cancer Hospital, Brompton, St. Mark's Hospital, City-road, the Fever Hospital, Pelley, Leckhampton, Cheltenham, and the Metropolitan Free Hospital, Spitalfields; and the whole of the large residue of his personal estate in equal shares to the Westminster Hospital, Broad Sanctuary, Charing-cross Hospital, King's College Hospital, Portugal-street, St. Mary's Hospital, Paddington, the London Hospital, Whitechapel, the Royal Free Hospital, Gray's-inn-road, the London Fever Hospital, Liverpool-road, the City of London Hospital for Diseases of the Chest, Victoria-park, the Norfolk and Norwich Hospital, the Cheltenham Hospital and General Dispensary, the Great Yarmouth Hospital, and the British and Foreign Sailors' Home, Great Yarmouth.—Dame Anna Maria Hare-Clarges, of the Crystal Palace Hotel, Norwood, £500 each to the Royal Hospital for Incurables, Putney, and the Taunton Hospital or Infirmary, Somersetshire.—Mr. Arthur Blewett Bryer, of 7, Kennington-park-road, £200 to the Royal South London Dispensary for the Relief of the Sick Poor.—Mr. Foster Connor, of Lea Court, Bangor, co. Down, and of the Linen Hall, Belfast, £500 to the Belfast Royal Hospital.—Mr. Samuel Ellis, of 28, Gracechurch-street, tea merchant and grocer, £100 to the Yeatman Hospital, Sherborne.—Mr. Charles George Johnson Da Silva, of Bride-lane, Fleet-street, merchant and medicine dealer, and of Burntwood, Wandsworth-common, such part of the residue of his personal property as may by law be applied for charitable purposes, to the Royal Medical Benevolent College, to found three exhibitions of £50 per annum each, tenable for three years, for boys educated at the College and proceeding to the universities, and to pay £20 per annum each to twenty-six poor pensioners of the said college.—Mr. Alfred Burges, late of Worthing, £3500 to such charitable institutions or societies, and in such shares, as his trustees in their absolute discretion shall think fit.—Miss Elizabeth Lancaster, of Stanmer House, Suffolk Lawn, Cheltenham, £250 each to the Cheltenham General Hospital and Dispensary, the Cheltenham Samaritan Fund and Dispensary, a branch of the said Hospital, the Scarlet Fever Ward or branch of the Delancy Hospital, and the Small-pox Ward or branch of the said Hospital.—Mr. Thomas James Stallard-Penoyre, late of 54, Wilbury-road, Hove, £50 to the Cancer Hospital, Brompton.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Milton Rural District.—Dr. Sutton explains the value of the infectious hospital which was jointly erected by this authority and the Sittingbourne Local Board of Health, a sudden outbreak of small-pox having been checked by it, in addition to its having been found useful in other diseases. Rainham has stood in need of much amelioration, the report on this place taking note of polluted drinking-water, offensive closets, defective drainage, overflowing cesspools, and insanitary slaughter-houses. All these conditions are, according to the report, remedied. We trust the remedies are permanent, and not merely of a temporary sort. The death-rate for 1885 was low—namely, 13·1 per 1000.

Jarrow Urban District.—The great depression of trade which has been so peculiarly felt in Jarrow has not, according to Dr. Munro, produced any appreciable effect on the death-rate for last year, that rate standing at 22·1 per 1000 as opposed to 23·4 during the previous two years. The zymotic rate was high, reaching 44 per 10,000 of the popula-

tion; measles, scarlet fever, and whooping-cough being the three diseases which caused most deaths. Scarlet fever was largely maintained by attendance at one of the elementary schools, and since obscure cases baffled Dr. Munro's efforts to limit the spread of the disease by the exclusion of scholars from infected houses, it was at last found necessary to close the school under the provisions of the Education Code. The school was well cleansed whilst closed, and the result was that after its reopening there was no recrudescence of the disease in connexion with the re-assembling of the children. This result was favoured by the system of compulsory notification of infectious diseases in force within the borough. During the year 714 cases were notified to the authority, no less than 264 being cases of scarlet fever, and in this connexion it is satisfactory to note that an infectious hospital is in course of construction. This matter has been a tedious one in Jarrow. Economical reasons prevented a joint hospital being erected for Jarrow and the neighbouring towns of South Shields and Hebburn, and the result is that at last Jarrow has to act alone, at a greater cost than the joint scheme would have involved, and with the prospect of larger permanent expenses of maintenance than would otherwise have been involved. Apart from these considerations, however, there are certain advantages in each sanitary authority having its separate hospital.

South Shields Urban District.—Dr. Munro gives the death-rate of this district during 1885 as 22·3, much the same as in the previous year, the zymotic rate being 32 per 10,000, which was in excess of that for the previous four years. Small-pox has now been introduced in thirty-three instances during three and a half years, and as regards each first case Dr. Munro is able to add that it was removed to hospital. The result of this action has been that in no single instance has there been any extension of the disease after it became reported to the Health Office. Scarlet fever caused no less than 76 deaths during the year, and the failure to cope with it satisfactorily is in part ascribed to the absence of compulsory notification. Again and again efforts in the direction of prevention were ultimately found to have been futile, owing to some unknown case a few doors off, or just on the other side of the street. The infectious hospital received 126 cases, including Dr. Munro himself, who, having contracted scarlet fever in the performance of his official duties, showed an example by placing himself under isolation in the manner provided by the authority. In connexion with the general sanitary work carried out, proceedings under the Food and Drugs Act are specially adverted to, Dr. Munro finding himself hampered by a decision of the Town Clerk to the effect that since milk for analysis must, according to the Act, be procured "at the place of delivery" and "in course of delivery," the taking of samples from carts entering the town would not justify legal proceedings under the Act. The report proceeds to say that the sooner the section is cleared of this ambiguity, and it is provided that samples of milk may be taken on the highway, the better for the consumer and the worse for the adulterator.

Northampton Urban District.—The birth-rate of Northampton has steadily fallen from 41·3 per 1000 in 1878 to 32·6 in 1885; the death-rate for the latter year was 15·5 per 1000. Measles, whooping-cough, and diarrhœa were the three preventable diseases which caused the largest mortality, and they led to a largely increased zymotic rate. Some use was made of the make-shift isolation hospital, but for the diseases just specified isolation is rarely resorted to, and it is doubtful how far it would be useful to urge it on sanitary authorities. From Mr. Cogan's account of the current sanitary work, inspection of the district would appear to be systematically carried out, with the result of an abatement of many injurious nuisances. Disinfection is largely resorted to where needed, and there is now a prospect that in the very important matter of water-supply the town will before long be freed from the serious danger to which it has been put by previous failure in the matter of deep well sinking.

Toxteth Park Urban District.—This favoured suburb of Liverpool had a death-rate of only 13·4 per 1000, and even this is decidedly in excess of the mean for the previous four years. Of the diseases usually grouped together as zymotic 9 were from whooping-cough and 4 from diarrhœa; but there was also some small-pox and scarlet fever, of which details are given by Dr. Steeves, and special action as to school attendances, disinfection, &c., had to be taken in consequence. It is, however, satisfactory to know that the sanitary authority are in earnest in their endeavour to secure a hospital for the isolation of first attacks of infectious diseases, and that they have already taken preliminary steps to secure a site. Attention has been given to the sanitary state of bakehouses and dairies, and systematic inspection of the district has been carried out.

Sittingbourne Urban District is also under Dr. Sutton's jurisdiction, and both scarlet fever and small-pox were stayed by the aid of the hospital already referred to. An excellent water-supply is mentioned as having done much to diminish outbreaks of enteric fever, 1400 out of 1543 houses being now supplied from the public works. Constant scavenging is also maintained throughout the town. The annual death-rate reached 17·3 per 1000, and the birth-rate was 43·6.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6106 births and 3254 deaths were registered during the week ending May 22nd. The annual death-rate in these towns, which had been equal to 20·6 and 19·1 per 1000 in the preceding two weeks, further declined last week to 18·7. During the first seven weeks of the current quarter the death-rate in these towns averaged 19·8 per 1000, and was 3·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 12·5 in Derby, 13·0 in Brighton, 13·9 in Bristol, and 16·1 in Hull. The rates in the other towns ranged upwards to 22·7 in Halifax, 24·1 in Portsmouth, 25·2 in Manchester, and 34·0 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 367 and 324 in the preceding two weeks, further fell last week to 286; they included 108 from measles, 87 from whooping-cough, 27 from "fever" (principally enteric), 27 from diarrhœa, 21 from scarlet fever, 15 from diphtheria, and 1 from small-pox. No death from any of these zymotic diseases was recorded last week either in Birkenhead or Huddersfield, whereas they caused the highest death-rates in Blackburn, Portsmouth, and Preston. The greatest mortality from measles occurred in Blackburn, Bolton, and Preston; whooping-cough showed the highest proportional fatality in Salford, Manchester, and Cardiff; and "fever" in Portsmouth. The 15 deaths from diphtheria in the twenty-eight towns included 9 in London, 2 in Liverpool, and 2 in Leeds. Small-pox caused 1 death in Liverpool, but not one in London or in any of the twenty-six large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had increased in the previous eight weeks from 7 to 31, had further increased to 35 on Saturday last; 10 new cases were admitted to these hospitals during the week, against 11 and 9 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 309 and 293 in the preceding two weeks, further declined last week to 282, and were 33 below the corrected weekly average. The causes of 66, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Sunderland, and in four smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Newcastle-upon-Tyne, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·1, 22·3, and 22·2 per 1000 in the preceding three weeks, further declined to 21·8 in the week ending May 22nd, and exceeded by 3·8 per 1000 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 13·7 and 18·1 in Dundee and Aberdeen, to 22·9 in Perth and 25·4 in Glasgow. The 538 deaths in the eight towns showed a decline of 10 from the number returned in the preceding week, and included 11 which were referred to whooping-cough, 10 to measles, 7 to diarrhœa, 6 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 5 to scarlet fever, and not one to small-pox; in all, 44 deaths resulted from these principal zymotic diseases, against 62 and 55 in the preceding two weeks. These 44 deaths were equal to an annual rate of 1·8 per 1000, which slightly exceeded the mean rate from the same diseases in the twenty-eight

English towns. The fatal cases of whooping-cough, which had declined from 21 to 14 in the preceding three weeks, further fell last week to 11, of which 7 occurred in Glasgow and 3 in Edinburgh. The 10 deaths referred to measles showed a decline of 7 from the numbers in the previous week, and included 8 in Edinburgh. The 7 fatal cases of diarrhœa were fewer than those returned in any recent week, and less than half the number in the corresponding week of last year. The deaths from "fever," which had been 2 and 5 in the preceding two weeks, further rose last week to 6, of which 2 occurred in Glasgow and 2 Aberdeen. The 5 fatal cases of diphtheria exceeded by 2 the number in the previous week, and included 3 in Edinburgh and 2 in Glasgow. The 5 deaths from scarlet fever were all recorded in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 108 and 103 in the preceding two weeks, rose again last week to 119, and exceeded by 12 the number in the corresponding week of last year. The causes of 66, or 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 27·8 and 23·3 per 1000 in the preceding two weeks, rose again to 28·7 in the week ending May 22nd. During the first seven weeks of the current quarter the death-rate in the city averaged 27·1 per 1000; the mean rate during the same period did not exceed 18·6 in London and 19·3 in Edinburgh. The 194 deaths in Dublin last week showed an increase of 36 upon the low number in the previous week, and included 6 which were referred to the principal zymotic diseases, against 14 and 8 in the previous two weeks; 2 resulted from "fever" (typhus, enteric, or simple), 2 from whooping-cough, 1 from diphtheria, 1 from diarrhœa, and not one either from small-pox, measles, or scarlet fever. These 6 deaths were equal to an annual rate of 0·9 per 1000, the rate from the same diseases being 1·6 in London and 3·1 in Edinburgh. The fatal cases of whooping-cough, which had been 7 and 2 in the preceding two weeks, were again 2 last week. The deaths referred to whooping-cough, which in the previous two weeks had been 1 and 3, declined last week to 2. Two inquest cases and 1 death from violence were registered; and 53, or more than 27 per cent., of the deaths were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable increase upon those returned in the previous week. The causes of 30, or more than 15 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Brigade Surgeon George Scott Davie, M.D., is granted retired pay, with the honorary rank of Deputy Surgeon-General; Surgeon-Major Christopher John Weir, M.B., is granted retired pay, with the honorary rank of Brigade Surgeon.

ADMIRALTY.—Royal Naval Artillery Volunteers (Bristol Brigade): Francis William Slow Wicksteed, M.B., M.R.C.S., to be Surgeon.

The following appointments have been made:—Staff Surgeon Alex. R. Joyce, to the *Cleopatra*; and Staff Surgeon J. W. H. Howton, to the *Daring*.

ARTILLERY VOLUNTEERS.—1st London (City of London): James William Thornton Gilbert, Gent., to be Acting Surgeon.

ENGINEER VOLUNTEERS.—1st Gloucestershire (the Western Counties): Surgeon T. S. Ellis is granted the honorary rank of Surgeon-Major.

RIFLE VOLUNTEERS.—3rd Durham (the Sunderland): Mitchell Hunter, Gent., M.D., to be Acting Surgeon.—2nd Volunteer Battalion, the Hampshire Regiment; Henry Wm. Russell Bencraft, Gent., to be Acting Surgeon.

THE VOLUNTEER MEDICAL STAFF CORPS.—Woolwich Company: James Francis Henry Bottrell and Charles Henry Hartt, to be Surgeons.—Edinburgh Company: Charles W. Cathcart, M.B., and David Hepburn, M.B., to be Surgeons.

THE annual meeting in connexion with Dr. Barnardo's Homes for Orphans and Destitute Children was held on the 22nd inst.

Correspondence.

"Audi alteram partem."

THE MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

To the Editor of THE LANCET.

SIR,—The fourteenth annual meeting of the American Public Health Association is to be held at Toronto during the first week in October, and I have been requested by Dr. C. W. Covernton, the first vice-president, to bring the meeting to the notice of English sanitarians, in the hope that they may be willing to visit Canada on that occasion. In addition to the reading and discussion of papers on various matters relating to hygiene set out in the circular I beg to enclose, it is desired to establish an International Congress of Hygiene, and to get international protective laws passed safeguarding Europe from the importation of yellow fever and the continent of America from small-pox and cholera.

If a number of persons, amounting to fifty, elect to go to Canada, they would be conveyed from London to Toronto and back, first class, for twenty guineas a head; while for another twenty guineas those who might desire to see more of the country would be carried by the Canada Pacific Railway along a most charming line of country from Quebec, Montreal, or Toronto to the terminus of the road—Vancouver, or to any part of British Columbia they might elect to stop at on the line,—and return to either of the above starting-points. I shall be happy to receive the names of persons who would like to make up a party, and shall be pleased to give any more detailed information. As this invitation is doubtless meant as an international courtesy, I make no apology for trespassing on your space, but thank you, in anticipation, for affording me the means of bringing to the notice of English sanitarians the favourable opportunity which presents itself for spending a delightful autumn holiday among our colonial and American brethren.

I am, Sir, yours obediently,

C. E. SAUNDERS, M.D.,
Hon. Sec., Society of Medical Officers of Health.

21, Lower Seymour-street, W., May 26th, 1886.

PARALYSIS OF LARYNGEAL MUSCLES AND CORTICAL CENTRE FOR PHONATION.

To the Editor of THE LANCET.

SIR,—In your issue of to-day we observe two editorial annotations referring to the above subjects, upon which we hope you will allow us to make a few remarks.

In the first you comment upon a case of paralysis of the adductors of the right vocal cord, reported by M. Charazac of Toulouse, and explained by that author to be due to compression of the right recurrent laryngeal nerve by a cystic goitre. This case, M. Charazac believes, sufficiently proves that the general law proposed by one of us some years ago—viz., that in *all* cases of progressive affection of the roots or trunks of the laryngeal motor nerves, due to *organic* lesions of the latter, the *abductor* fibres and muscles first succumb—cannot be maintained, and that a paralysis thus produced may, indeed, show itself first in the *adductor* muscles. Now, the law referred to was established not merely on clinical observation, but on the solid ground of morbid anatomy, and we may now add to this experimental evidence, which we have been accumulating for several months. Consequently, we consider that it is only fair to admit any contention to the contrary as in the least degree cogent, when it is supported by the *exhibition of specimens*, showing that in cases in which the roots or trunks of the motor nerves of the larynx were attacked by organic disease, the *adductor* muscles only had undergone degenerative changes, whilst the abductor or abductors remained unaltered.

Concerning the second annotation—viz., the one referring to M. Garel's case of paralysis of the left vocal cord, attributed by that author to two patches of softening situated in the third frontal convolutions of both hemispheres,—we

confess we are quite unable to understand the grounds upon which he bases this opinion. We have been for some time engaged in carrying out an extensive series of researches into the localisation of the centres for the phonatory movements of the vocal cords in the cerebral cortex. In these experiments, which have been performed on monkeys, dogs, cats, and rabbits, and the results of which will soon be published in full, we have been able to confirm the results on dogs obtained by Dr. Krause of Berlin—namely, that the phonatory function of the vocal cords of the dog is bilaterally represented in the gyrus præfrontalis of each hemisphere. We find that this state of things apparently varies with different classes of animals. (In the monkey, we may mention in passing, we have found that the phonatory centre is situated in that part of the brain which corresponds exactly to the speech-centre in man; only it is bilaterally represented.) Under *all* circumstances—i.e., in *all* animals—however, we have seen (*a*) that stimulation of this centre in *one* hemisphere produced *bilateral* action of the vocal cords, and (*b*) that the effect was exactly the same whether the *right* or the *left* hemisphere was stimulated. That *bilateral* representation also exists in *man*, we consider to be established by the fact that aphasia is hardly ever accompanied by aphonia, which it necessarily would be if the phonatory centre were represented in the *left* third frontal convolution only.

Now, in the face of these facts, we are simply unable to understand in M. Garel's report how it came about that *bilateral* cortical mischief produced only paralysis of *one* vocal cord? Would it not seem more likely that some other lesion, by which this unilateral paralysis could have been more naturally explained, was present and overlooked?

We are, Sir, yours truly,

FELIX SEMON.
The Brown Institution, May 22nd, 1886. VICTOR HORSLEY.

THE LUNACY ACTS AMENDMENT BILL.

To the Editor of THE LANCET.

SIR,—In the memorandum on the Lunacy Acts Amendment Bill it is stated—"The principle of the Scotch procedure has been adopted with somewhat fuller elaboration of details. The Bill provides for the appointment of special justices to make orders for the reception of lunatics not paupers, and, except in cases of urgency, a person not a pauper is not to be confined as a lunatic without an order of a County Court judge, stipendiary magistrate, or justice, to be obtained upon a petition presented, if possible, by a relative, and accompanied by two medical certificates." But in this assimilation of English to Scotch procedure it must not be supposed that there is any assimilation of the Scotch principles of lunacy administration. If lunatics are to be confined in asylums on the order of a magistrate, there can be little doubt that our system is very much superior to that which obtains in England at the present moment. It is a calm judicial procedure applied to all cases equally, be they rich or poor. It works easily and smoothly with us, no difficulties arise in its employment, and it affords a certain degree of assurance to the public that all matters connected with the seclusion of the insane are conducted decently and in order. No feeling of doubt or suspicion exists in Scotland, and since 1859 (the date of the first Scotch Lunacy Act) not a single case has come into court arising out of circumstances occurring subsequently to that date in which suspicion has been thrown on the propriety of the confinement or detention of an insane person. But is this happy state of things due to the sheriff's order? I think not; or, if it is, it is only to a very small extent. The reason of the smooth working of lunacy matters in Scotland is mainly due to two circumstances—(1) It is a small country, with a limited number of lunatics, and (2) we have a sufficient and efficient General Board of Lunacy. In a comparatively small community like ours everybody knows everybody. The sheriff knows the certifying doctors either personally or by reputation, or he can readily procure information regarding them should he desire it. The second circumstance, the constitution of our General Lunacy Board, is, however, of much greater importance. This board consists of an unpaid chairman, two unsalaried legal and two salaried medical commissioners, who supervise twenty-nine asylums, sixteen poorhouse wards for the reception of pauper lunatics, and three training institutions for imbecile children. These various institutions contain about 6500 patients. Each of the medical commissioners visits each asylum at least twice a year. Now the practical result of this is that these officers become personally acquainted with every case of any particular importance—important, I mean, as regards the necessity or propriety of detention. In England the General Board of Lunacy consists of an unpaid chairman, and two unpaid and three paid legal commissioners, and two unpaid and three medical commissioners. In visiting the various asylums a legal and a medical commissioner hunt in couples. What practical use this is I fail to understand, nor have I ever received a reasonable explanation from any one competent to judge. In Scotland it would sound to us simply ridiculous were it proposed to start an Advocate or a Writer to the Signet in company with a doctor to make tours round asylums. I have asked many English superintendents of asylums of long and great experience, two retired and some acting inspecting officers, whether they ever knew of a case in which the slightest benefit resulted from the presence of a visiting legal commissioner. The answer was invariably No. The strongest advocate of this system may be challenged to produce a single case in its support—a case in which any legal difficulty had arisen which could not have been as well settled by reference to the General Board sitting in London. Legal commissioners are absolutely useless, and waste public money which might be applied in other directions.

The three medical commissioners have to visit something like 140 asylums, each pauper asylum being visited once, and each private one twice yearly, but not by the same men time after time. I submit that considering the enormous size of many of these institutions, the immense number of patients to be seen, and the great extent of the perigrinations, it is impossible for the English medical commissioners to have the same knowledge of individual patients as ours have. Three such officers inspect some 50,000 lunatics; whereas in Scotland something like 6500 are inspected by two commissioners. It has been suggested that our officials are not overworked—that, in fact, one medical commissioner would be sufficient; but, apart from all other considerations (and there are many), if these two officials maintain public confidence their not extravagant salaries are well-expended public money.

The principles of the Scotch system are—limited areas and ample supervision; and without these magistrates' orders will be futile. My humble opinion is that the line reform should take in England should be in the direction of the adoption of Scotch principles, not merely of Scotch legal procedure, and in this wise: First, that the constitution of the General Board of Lunacy should be improved by the conversion of legal into medical commissioners, the number of whom should be increased to ten or twelve. All legal difficulties could be considered by a standing counsel, by an efficient legal secretary to the Board, or by honorary legal commissioners sitting in London. Secondly, that England and Wales should be broken up into lunacy districts, each of which should contain not more than 10,000 lunatics. Thirdly, that two medical commissioners should be appointed *to reside* in each district, the asylums of which they should visit regularly twice a year. Periodical meetings of the General Board should be held in London, which one commissioner from each district should attend.

I believe by this means public confidence in England would be established, and that the same elasticity of management as exists in Scotland would be obtained. The Scotch Board, having the whole of our institutions immediately under its eye, can and does allow great latitude of action in the management of individual asylums, which is impossible under existing circumstances in England, where there is a much greater tendency towards officialism and red-tape than with us.

It may be fairly argued that one reason of the absence of doubt and suspicion in Scotland is the small number of private asylums. This is an argument of no small weight, as most of the legal difficulties have arisen in them; but as such institutions are not likely to be abolished, at least for some considerable time, in England, the strength of my contention is not weakened.

I am, Sir, yours obediently,

Edinburgh, May 15th, 1886. JOHN BATTY TUKE.

RÖTHELN OR RUBELLA.

To the Editor of THE LANCET.

SIR,—Your correspondents on the above subject will find it stated in Quain's Dictionary, under the latter name, that "enlargement of the lymphatic glands in the neck is an early symptom, most marked in children." It is one that I have noted in three previous descriptions given by me of this exanthem.—I am, Sir, your obedient servant,

Orchard-street, W., May 24th, 1886. WILLIAM SQUIRE, M.D.

"THE MEDICAL BILLS."

To the Editor of THE LANCET.

SIR,—In the interest of the profession, permit us to say on behalf of the Medical Alliance Association that the "clause" sent to you by Dr. Wiglesworth of Liverpool, and which you published on Saturday last, does not restrict the practice of medicine or surgery by unqualified persons, nor does it prevent the assumption of medical or surgical titles by persons holding unrecognised medical qualifications.

We are, Sir, yours faithfully,

PRIDHAM, PIPER, & Co.,
Solicitors to the Medical Alliance Association.

Old Serjeants' Inn, W.C., May 17th, 1886.

BELFAST.

(From our own Correspondent.)

QUEEN'S COLLEGE: THE MEDICAL STUDENTS AND THE ROYAL UNIVERSITY EXAMINATIONS.

On the 21st instant a joint meeting of graduates and undergraduates was held at Queen's College "to discuss certain grievances which the candidates from the Belfast Medical School have suffered at the recent examinations of the Royal University of Ireland." There was a large attendance, as the students feel deeply interested in the matter. Dr. O'Neill, surgeon to the Royal Hospital, presided. The Chairman having spoken, and a considerable number of those present having given expression to their views on the matter, the following resolutions were unanimously adopted:—1. "Whereas, of the candidates presenting themselves for the various examinations in medicine in the Royal University, Ireland, about 40 per cent. receive their professional education in the Belfast Medical School; and whereas at the first medical examination, of the four examiners only one—at the second medical examination, of the nine examiners only two—and at the M.B. examination, of the thirteen examiners only one, are from the Belfast School; and whereas we are convinced that the students of the Belfast Medical School are thereby placed at a great disadvantage, and the Belfast School materially injured: resolved that we do hereby direct the attention of the Senate of the said University to the existence of this anomaly, and that we respectfully request them to remove it by giving a fair and proportionate representation to the Belfast Medical School on the Examining Board." 2. "That the method of conducting some of the oral examinations is eminently unsatisfactory, especially the oral examinations in practical physiology at the M.B. degree examination, in which sufficient time is not allowed to the candidates for the amount of work to be done; and that in the examinations in medicine, surgery, midwifery, and gynæcology questions are asked and methods of treatment required which are not found in the standard text-books, or recognised by the leading medical schools of the United Kingdom; and not only so, but the methods taught and advocated by the leading London physicians and surgeons are in some instances not accepted, and that on the part of some of the examiners there is a marked want of courtesy towards the candidates." 3. "That in a great many instances the questions are unscientific and devoid of practical importance, and that the tendency of the questions in medicine, surgery, midwifery, and gynæcology has been of such a nature as to render it a matter of absolute necessity to spend some time in Dublin at considerable expense and inconvenience under the charge or care of a 'grinder' in order to be acquainted with the peculiarities and the special lines of treatment advocated by the several examiners, as in many cases these cannot be learned from the standard text-books." 4. "That additions have been made to the courses of examination without sufficient notice having been given." 5. "That copies of the foregoing resolutions be sent to the Lord-Lieutenant, Chief Secretary, Under Secretary, and to the Senate and examiners of the Royal University, and that the chairman and secretary be appointed as a deputation to wait on the Senate at their next meeting, and to present their own views to him." This deputation waited on the Senate of the Royal University on the 25th. Dr. O'Neill of Belfast, having read the resolutions (given above), stated that it was not the Queen's College nor the Belfast Royal Hospital that he represented, but the entire body of students, who attended every means given for medical instruction in Belfast. Having referred to the unsatisfactory method of conducting some of the oral examinations, to the method adopted with regard to examinations as to treatment of cases, he said no man was safe unless he answered according to the Dublin system of treatment. He complained that in many instances questions unscientific and devoid of any practical importance were sometimes put, and affirmed that it was necessary, in order to cope with the present extraordinary system, that students should come to Dublin, and be coached by grinders so as to become acquainted with the peculiarities of examiners and the several lines of treatment advocated by these examiners. In conclusion, he asked that a commission might be appointed to inquire into the allegations made, and said they were prepared to abide by the result. Lord Emly, the Vice-Chancellor, who presided, observed that Dr. O'Neill had presented the case of the Belfast Medical School fully and forcibly. The grievances complained of would receive the very best attention of the Senate. The latter decided to refer the matter to a special committee, consisting of the Standing Committee and medical members of the Senate, for consideration and report.

BELFAST ROYAL HOSPITAL.

In the report read at the quarterly meeting (May 24th), it was stated that during the quarter there were 459 in-door patients, while during the same period there were treated 2718 extern patients. The financial section of the report showed that the donations and bequests amounted to £356 19*s.* 3*d.* The general subscriptions, however, compared with last year, showed a falling off of £31 9*s.* 9*d.* The ordinary income had not kept up with the ordinary expenditure. When all the April accounts were paid there would be an amount due against the hospital of £579 17*s.* 11*d.* The board recorded with deep regret the death of their president, Lord Shaftesbury, as well as of one who had taken a deep interest in the charity, Sir Wm. G. Johnston, D.L. Saturday, May 29th, has been set apart by the board as Hospital Saturday, and great exertions are being made to render the effort a success.

THE MEDICAL SCHOOL.

The summer session has now commenced, and teaching is going on regularly at the College and Royal Hospital. Dr. Cuningham, Professor of Natural History, is conducting a special class at the College in Practical Biology for the benefit of students in these subjects, it being now necessary for medical students to pass a practical examination in zoology at the Royal University.

THE ST. JOHN AMBULANCE ASSOCIATION.

In the report presented at the first meeting of the Belfast Branch of this Association on May 24th, it is stated that the organisation of the Belfast Centre is complete. Since the foundation of the centre, courses of lectures have been delivered in Belfast, Limavady, Omagh, and Portrush. Seventy-one members have passed the examinations and received certificates from the Association. Dr. John Moore is the Honorary Secretary.

Belfast, May 25th.

HOME HOSPITALS.—At the eighth annual meeting of the Home Hospitals Association, on the 20th inst., it was reported that there had been during the year 625 applicants for admission, of whom 282 were admitted. The average number of patients in the hospital at one time was 19, and their average stay was 24 days. The balance sheet showed that the year's income amounted to £4576, and the expenditure left a balance of £787.

PARIS.

(From our own Correspondent.)

THE ABUSE OF ALCOHOL.

OWING to the ravages that are being committed by alcoholism in this country, the authorities have felt it high time to interfere, and to adopt such measures as will prevent the physical and moral degradation to which the population is being reduced by the excessive abuse of spirits, and especially spirits of an inferior quality. The subject has been brought before the Senate, which ordered a commission to investigate the matter. The reporter suggested that whatever other measures be taken, legislative or otherwise, they would be of little or no avail unless the rectification of the alcohols delivered for consumption be exacted. Among the other measures proposed by the commission to reduce alcoholism to a minimum may be mentioned increase of the duty on alcohol, the prevention of "vinage," or the addition of alcohol to wines, and the reduction of the number of "cabarets" or wine-shops. As regards vinage, M. Girard, Director of the Municipal Laboratory of Paris, who was consulted on the subject, stated that experiments performed by him showed that the addition of alcohol to wine destroyed the properties of the latter in precipitating a portion of the tartaric acid and extractive matters it contains. Dr. Dujardin-Beaumetz, in the name of the Council of Hygiene, declared that the process of vinage profoundly altered the wine without in any way improving it, except for the purpose of preservation, which is of advantage only to the wine merchant. Dr. Brouardel, the President of the Society of Hygiene, made a statement to the same effect, and added that vinage was a source of great danger to the public health. Although this process was approved of by the Academy of Medicine in 1870, it is presumed that if it were now consulted it would express a different opinion, as the study of the physical and chemical constitution of alcohols, as well as of their toxic properties, has made considerable progress since that time. In connexion with this subject, I may note that the Academy of Sciences has been furnished with some startling facts respecting the production of the liquid commonly sold as cheap brandy. Out of more than 50,000,000 gallons of alcohol distilled annually, not quite 500,000 gallons, according to M. Girard, were distilled from the grape. The greater portion of spirit is obtained from grain, which, if sufficiently rectified, is not unwholesome; but, this being very rarely done, the spirit is noxious. Alcohol is also distilled from apples, pears, potatoes, and beetroot, all of which contain poisons of various kinds.

THE IDENTIFICATION OF CRIMINALS BY ANTHROPOMETRY.

About two years ago Dr. Bertillon, Director of the Statistical Department of the Prefecture of Police, introduced a system of anthropometry for the purpose of identifying criminals and others when arrested. This system has been attended with the best results, as it was not always easy to identify criminals by simple photographs. Since the adoption of anthropometry many old offenders have been recognised, and dealt with according to their offences.

Paris, May 25th.

BERLIN.

(From our own Correspondent.)

VIRCHOW'S JUBILEE.

TO-DAY three decenniads have passed since Professor Rudolph Virchow commenced his duties as teacher of pathological anatomy in Berlin. Here he studied, and, deducting the seven years in which he occupied the chair at Wurzburg, he has displayed great activity in practice since 1844 in the city. His cellular pathology, too, which procured for his name a world renown, has its roots in the soil of medical Berlin. Under the guidance of Johannes Müller, Theodor Schwann pursued his studies in which he proved that the animal body is constructed of separate organisms out of cells. Virchow's companions of that time were Emil Dubois Reymond, Ernst Brücke (Vienna), and Karl Reinhard (who died in 1852). Next to Johannes Müller, it was Robert Froriep, professor at the Charité, to whom Virchow was most indebted. The former was his guide in the paths of general biology and pathology, but it was the latter who introduced him to practice and to the methods of observation. Later Virchow became the successor to his two masters—to Froriep in 1846, who out of regard to his family removed to Weimar; and to Johannes Müller in 1856, who welcomed Virchow on his return to undertake the duties of the chair of Pathological Anatomy, which till then had been united with that of Anatomy and Physiology. Virchow's career as teacher began with his appointment as prosector at the Charité. In the summer of 1846 he gave his first lecture on Pathological Anatomy. Till then Vienna had been without dispute the home of pathological anatomy. This branch had been neglected in Berlin. At the commencement of 1830 a former midwife, named Vogelsang, used to take the sections in hand. The renowned Pirogoff went through a course of pathological dissection and surgical operation under the guidance of this lady. Virchow soon gathered a circle of enthusiastic workers around him, on whom the juvenile teacher (he was only twenty five years old) exercised a mighty influence. Of the members of his first course who have later become known may be mentioned Alexander von Francius, teacher of zoology at Breslau (died 1877), Carl Hoffmann (died at Costa Rica), both distinguished *savants*, and Carl Pagenstecher. Certain events in the year 1847 led to an interruption of the lectures. Virchow took an active part in political life. It appeared to him the duty of a physician to support the efforts of the Liberal party. "The physician is the natural adviser of the poor," he wrote at that time. The managers of the Charité were offended at the democratic opinions of their prosector, and dismissed him from his post, in which, however, after a short time he was reinstated, but only with half the salary. Under such circumstances his appointment to Würzburg was very opportune, especially as he was engaged to the daughter of the gynæcologist, Carl Meyer. In May, 1856, he was recalled to Berlin, and the erection of a pathological laboratory was consented to, which Virchow had made a condition of his acceptance of the appointment, and which became a sort of shrine for aspiring medical students. A number of important works have issued from it. Many of Virchow's students and assistants became professors. Of the assistants may be mentioned Hoppe Seyler and Recklinghausen of Strasburg, Grohé, Hueter, and Grawitz of Griefswald, Kühne of Heidelberg, Klebs of Zurich, Cohnheim of Leipsic, and Ponfick of Breslau. But almost innumerable are the practical physicians who have gone forth from Virchow's school, who will never forget the shrewd conclusions and the clear expositions which distinguished the lectures of their eminent master.

Dr. Gaertner, formerly of the "Reichs Gesundheitsamt" in Berlin, has been appointed Professor of Hygiene at the University of Jena. He is known as the author of a paper on "Hygiene on Board Ship,"[1] also for experiments as to the best way of making use of the different antiseptic remedies in the treatment of wounds, on which subject he reported at last year's German Surgical Congress.

Dr. Loeffler has qualified as Privat Docent in Hygiene at the Berlin University. Dr. Loeffler has assisted in the investigations of Koch on the anthrax vaccination, which led later to a scientific feud between Drs. Koch and Pasteur. Dr. Loeffler has worked with Professor Schütz on the disease of glanders, which in 1882 led to the discovery of the specific bacillus. His works on Disinfection through Hot Water Steam and on Diphtheria in Human Beings and in Pigeons are also worth mentioning.

Berlin, May 16th.

[1] Cf. Vierteljahrsschrift für öffentliche Gesundheitspflege, 1881.

DEATH OF A CENTENARIAN.—A woman named Craughwell died recently near Ballinrobe, at the advanced age of 105. Her health up to the day before her death was so good that she attended a funeral within a few hours of her decease. Married at seventeen to a soldier, she went through all the Peninsular wars, and later on was at the battle of Waterloo. She subsequently went to India and China, and returned to Ballinasloe a widow about fifty years since. A correspondent of the *Cork Constitution*, from which these details are taken, states that the week before her death he saw her knitting and sewing.

Obituary.

HENRY JACKSON, M.R.C.S.

THIS young, active, and genial member of our profession, whose death took place at Barnstaple on April 26th, passed his pupilage with Dr. Harper of that town, and entered the Middlesex Hospital, where he was characterised by his persevering industry, which won him several class distinctions. Having qualified as M.R.C.S. and L.S.A., and held the resident post of obstetric officer, he returned to Barnstaple as partner with Dr. Harper in 1873. At the time of his death he was one of the surgeons at the North Devon Infirmary and consulting surgeon to the North Devon Dispensary; he was also medical officer and public vaccinator for the second and fourth districts of the Barnstaple Union, and medical officer of health for the Barnstaple Urban and Rural Sanitary Authority. In 1882 he married the only daughter of James Bilney, Esq., of Barnstaple, whom he leaves a widow with three children. The universal respect and goodwill entertained towards him, and the great sympathy felt for his relatives, were evidenced by the very large number of persons who followed him to his grave, and by the still larger concourse which lined the road to the cemetery. In the procession, besides relatives and friends from far and near, were the borough police, one hundred and thirty Oddfellows and Rechabites, a deputation from the North Devon Benevolent Society, all the medical men of the town without exception, the mayor and corporation, and representatives of the various borough institutions with which the deceased was connected, besides a goodly number of patients to whom he had endeared himself by his genuine kindness and professional skill. From one of the local papers we may cull a paragraph, as showing that the public are not wanting in appreciation of the work of the profession, which enables one even at an early age—Mr. Jackson was only thirty-five—to win a very large measure of esteem and goodwill. The *North Devon Herald* writes: "To very considerable attainments Mr. Jackson added infinite painstaking, much industry, and patient attention. His cheery presence, ready sympathy, and unvarying patience were as grateful as his advice; and that his heart was in his work was patent from the energy, time, and thought he gave to it. In his public capacities he well merited the high reputation he possessed for conscientiousness and hard work. As medical officer of health, he rendered valuable and devoted service in improving the sanitary condition of the locality. As one of the medical officers of the union, he was popular with the poor, and although they are singularly prone to grumbling, complaints from them were seldom, if ever, heard. All the more sorrow and regret are accordingly felt that so much steady application and exemplary zeal have been lost by his untimely removal. His illness only lasted some three weeks, and he succumbed to a complication of rheumatic fever, pleurisy, and heart affection."

PROF. LUIGI PAGANUCCI.

THE Tuscan School lost on the 13th inst. an able representative in Luigi Paganucci. He was born at Montelaterone, in the province of Siena, on July 8th, 1808, and devoted himself in the neighbouring seat of learning to the study of the medical sciences. He became especially accomplished in anatomy, on which he wrote a treatise ("Dell' Anatomia Umana"), which long held its ground, and was appointed Professor of the Science in 1850 at the R. Arcispedale di S. Maria Nuova in Florence. The chair, being a supplementary one, was suppressed in 1867, and three years later Prof. Paganucci had put himself on the retired list till, on March 10th, 1873, he was recalled from a by no means inactive seclusion to the Professorship of Descriptive Anatomy in the Istituto di Studi Superiori. In 1874 he assumed the post of superintendent of the Physiological Museum, and also became lecturer on Pictorial Anatomy to the students in the Fine Arts Academy.

His solidly grounded reputation for learning and teaching power was acknowledged not merely in Italy, but throughout Europe, by numerous scientific associations, of which he became active or honorary fellow—such as the Medico-Physical Academy of Florence, the Academies of the Fine Arts in Florence and Perugia, the Physio-Critical Academy of Siena, and many others. Among his published writings, besides the treatise on Human Anatomy already mentioned, may be enumerated "Della Matrice e delle sue Appartenenze nei differenti Periodi della Vita Muliebre, fuori del Tempo della Concezione" ("On the Matrix and its Appurtenances in the several Periods of Woman's Life, apart from the Time of Conception"); "Biography of Professor Tabarran"; "Parere interno all' Individualità dei due Scheletri trovati nel Mausoleo scolpito da Michel Angiolo, e che sta a sinistra di chi entra nella celebre Cappella della Basilica di S. Lorenzo" ("Opinion on the Personality of the Two Skeletons found in the Mausoleum sculptured by Michel Angelo, and standing on the left hand as you enter the celebrated Basilica of San Lorenzo")—a very ingenious tractate; and many contributions to the transactions and periodical literature of the profession.

"His loss," says a Tuscan contemporary, "will be poignantly felt wherever science and its votaries are held in honour. In Florence especially, where he had a wide circle of colleagues, pupils, friends, and admirers, the announcement will be received with a sense of almost personal bereavement."

DR. WILLIAM PATTULLO.

(OF NEWA, FIJI.)

THE news of the death (said to be due to acute dysentery) of this accomplished young medical practitioner—only three years after he had accepted, along with Dr. Beith, an appointment in our latest colony—will cause much sorrow among his friends. In alluding to this sad event, Professor Gairdner recently addressed to his class a few words, to the effect that, although the majority of those present could scarcely have known personally how much Dr. Pattullo was beloved and esteemed by all his teachers, he might be allowed to claim for those who could join with him in this tribute the sincere desire to give expression to their sympathy with Dr. Pattullo's sorrowing relatives, their regard for his memory, and their appreciation of his manifold virtues. A "son of the manse," added Dr. Gairdner, "and one of the best of the many good ones I have known as their teacher, he passed through his career as an undergraduate not only with distinction, but with brilliant success, and his bright and sympathetic character made the promise of his future in that far-off home, in one of the finest climates in the world, almost a matter to be rejoiced in as if it were already sure. About a year ago he came home, married, and returned to his post, and now we have the news of his premature death from a disease of which I only know as yet that it seemed to Dr. Beith to require the transfusion of blood from his own veins into those of his companion—a disease, therefore, probably acute, and certainly attended by extreme prostration. We can only now offer this tribute of our sympathy to the young wife whom he has left alone in the world, and to the parents who watched his infancy and his manhood alike with high hopes of his future success and reputation in his profession."

MEDICAL DEFENCE UNION.—On the 6th inst. nearly a hundred members of the profession met at the Birmingham Medical Institute to consider the desirability of forming a Midland Branch of the above Union. Mr. Lawson Tait occupied the chair, and stated, as showing the imperative need for co-operative action in our profession, that he himself, during the last twenty years, had actively assisted in the defence of twenty-one cases in which criminal charges or civil actions had been brought against medical men, in every one of which the charge had broken down. In most of these cases, had it not been for the spirited action of medical brethren, financial and social ruin would have resulted to the defendants. It was resolved to form a Midland Branch of the Medical Defence Union, and about sixty at once joined in the room. At a subsequent meeting, a local committee was formed for the management of the affairs of the Branch. Mr. Lawson Tait was elected president, and Dr. Leslie Phillips of Birmingham and Mr. F. S. Goulder of Dudley hon. secretaries; from these gentlemen any information may be obtained.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Notices respecting the election to the Council, for which there are four vacancies, were issued on Friday to every Fellow whose address is known to the Secretary, and the usual advertisement appeared on that date in the *London Gazette* and two daily newspapers, as required by Section 4 of the Bye-Laws. Fellows desirous of becoming candidates for re-election must apply to the Secretary for the necessary papers, which must, when duly filled up, be deposited with him *not later than Monday, June 7th next* We understand that two of the retiring members of Council will be candidates for re-election. The election will take place on Thursday, July 1st.

The following gentlemen, having previously passed the required examinations, were at the last meeting of the Council admitted Fellows and received their diplomas:—

Charles Wray, Long Marston; Membership dated Nov. 18th, 1881.
Harry Littlewood, Hempstead; April 17th, 1883.

At the same meeting the following gentlemen were elected Fellows as Members of twenty years' standing:—

George Yeoman Heath, Newcastle-on-Tyne; Membership dated May 17th, 1843.
Henry Cayley, Calcutta; December 21st, 1855.

Eighty-eight candidates presented themselves for the Primary Examination in Anatomy and Physiology on the 20th, 21st, 24th, 25th, and 26th inst., of whom 47 passed and 41 were referred.

ROYAL UNIVERSITY OF IRELAND.—The following have passed the examinations in Medicine and Surgery:—

BACHELOR OF MEDICINE.—Upper Pass: *Cornelius Bradley, *James Bradley, George Browne, James Chambers, *James Donelan, *George Freud, R. B. Gorsuch, *John L. Livingston, *Robert W. Nixon, Richard H. Wagner.—Pass: J. J. Attridge, W. F. Browne, J. K. Close, E. Curtin, S. H. Dunlop, G. F. Ewens, E. B. Hazleton, G. A. Junk, T. B. Kane, L. Lyttle, W. E. MacFeeters, W. Milligan, W. N. Murphy, A. T. Nash, J. O'Connor, C. O'Neill, W. J. Richardson, M. J. Robinson, J. T. Shaw, A. E. Thompson, J. J. Tobin, F. E. Townsend, G. R. Young.

* These candidates may present themselves for the Honour Examination.

MASTER OF SURGERY.—Cornelius Bradley, James Bradley, James Chambers, J. K. Close, Eugene Curtin, James Donelan, S. H. Dunlop, J. F. Eagleton, Robert English, John Flynn, B. Forde, G. Freud, R. M. Griffin, M. H. Hannigan, Daniel Lee, J. Livingston, W. E. MacFeeters, John Menary, S. Moore, W. U. Murphy, R. Nixon, John Oliver, C. O'Neill, W. E. Orr, W. Richardson, A. S. Thompson, A. E. Thomson, F. Townsend, R. H. Wagner, G. R. Young.

A meeting of Convocation of the University will be held on July 27th, to elect two members of the Senate in the vacancies caused by the death of Archbishop Trench and the expiration of Dr. Curtis's term of office.

COLLEGE OF PHYSICIANS IN IRELAND.—At the May examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Rodney Harrison Abbott, Arthur Badcock, Louis Birch, Guy Stewart L'Estrange, J. Watson Lonsdale, Daniel McCann, Francis Waldron McCauley, Elrington Simon Tuckay, Barcroft Carroll Manly, Walter John Reed, John Joseph Savage, Patrick Joseph Sheridan, William Edward Waters.

MIDWIFERY.—John H. Griffin, Guy Stewart L'Estrange, James Watson Lonsdale, Barcroft Carroll Manly, John Joseph O'Brien, Patrick Joseph Sheridan, William Edward Waters.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The undermentioned has been admitted a Fellow of the College:—

George Edward Twiss, Army Medical Staff.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on the 20th inst.:—

Hooper, Ebenezer, Kingston, Ontario.
Smith, Henry Craven, Cravensea, Cockington, Torquay.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—The quarterly meeting of the Medico-Psychological Association was held at Bethlem Hospital on May 19th, at 4 P.M. In the absence of the President, Dr. Eames, the chair was taken by Dr. Rayner. The following papers were read:—By Dr. Savage, on a case of "Insanity cured by removal of the Beard in a Woman"; by Dr. Percy Smith, on a case of "Ovariotomy in an Insane Patient"; and by Dr. Bower, on "Suicide and the Lunacy Laws Agitation." It was announced that the annual meeting would be held on August 9th.

DR. MATTHEW HINCHLIFFE has been placed on the Commission of the Peace for the borough of Dewsbury.

FOUR CHILDREN AT A BIRTH.—Mrs. Lars Grindahl, of Chetek, Eau, Claire County, recently gave birth to four children, all boys, who are doing well.

ON the 22nd inst. a boy was rescued from drowning at Chester by the gallant conduct of Mr. Hamilton, a local surgeon.

DR. COURY, of Kilkelly, has sent to M. Pasteur the first Irish patient, a man who was bitten by a rabid dog on the 11th inst.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—H.R.H. the Princess of Wales has fixed Friday, June 25th, at 1 P.M., for opening the new wing of the above hospital.

A BAZAAR in aid of the funds of the Great Northern Central Hospital will be opened at the Knightsbridge Barracks by H.R.H. the Princess Christian on the 31st inst.

THE anniversary banquet on behalf of the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor, has been postponed.

PRESENTATION.—The nurses of the Bradford Infirmary have presented Mr. W. J. Spence, the house-surgeon, who is leaving that institution, with a handsome walnut writing cabinet, bearing a suitable inscription.

MANSLAUGHTER BY A LUNATIC.—One of the inmates of the Richmond Lunatic Asylum, Dublin, was killed last week by another lunatic, who fractured his skull. The culprit will be sent to Dundrum Criminal Lunatic Asylum.

GUY'S HOSPITAL.—The Biennial Dinner will be held at the Holborn Restaurant on Friday, June 2nd, Mr. Durham in the chair. H.R.H. the Duke of Cambridge will distribute the school prizes on the same afternoon.

AN inquest was held at Widnes, on the 24th inst., on the body of a man who died two days previously from taking an overdose of laudanum. Although directed to take from ten to fifteen drops, the deceased took forty. A verdict of "Death from misadventure" was returned.

THE members of the Royal Commission on the Condition of the Blind, the Deaf and Dumb, &c., have left England for the purpose of inspecting the institutions for the blind and for deaf-mutes in Paris and the neighbourhood, and the systems of education there pursued.

THE LATE MR. KILGARRIFF.—This gentleman, whose death was referred to in our last issue, left his family unprovided for, and a meeting of friends interested in their welfare took place last week. The meeting was largely attended, and a sum of £200 was promised by those present.

GREAT NORTHERN CENTRAL HOSPITAL.—On Monday next, at 12 o'clock noon, Princess Christian of Schleswig-Holstein has consented to open the grand bazaar to be held at the Riding School, Knightsbridge Barracks, on the above day and June 1st and 2nd, in aid of the new buildings to be erected in the Holloway-road.

ANTHROPOLOGICAL INSTITUTE.—In connexion with the Institute conferences on the Races of the British Empire will be held on several days in the months of June and July, in the Conference Hall of the Colonial and Indian Exhibition. The first of the series will take place on June 1st, at 4 P.M., the subject being the Races of Africa.

WOLVERHAMPTON EYE INFIRMARY.—The committee of this institution have secured a suitable site of land, on the confines of the borough, on which to erect a new building, and a supporter of the charity has promised to erect an infirmary for in-patients, at a cost of £4000, provided that another building in connexion with it be constructed for out-patients, with consulting-room, waiting-room, and dispensary; and also that a sum of £2500 be subscribed as an endowment fund. It is estimated that altogether a total of about £8000 will be required to enable the committee to accept the offer made to them. The operations of the charity are at present carried on in a rented house much too small for the accommodation of the increasing number of patients.

CASE OF CATALEPSY IN CORK UNION WORKHOUSE.—There is at present in one of the male wards of the Cork workhouse a man named O'Sullivan, aged fifty years of age, who for over twelve months—viz., April 27th, 1885—has been in a deep sleep except when awakened to partake of food. On the date above mentioned he was found by the constabulary fast asleep in the open air, and removed to the workhouse. When shaken roughly, he awakes and will do what he is told, and when food is placed before him he will take it, but he has to be shaken at intervals to prevent him going to sleep. When he has finished eating, he falls asleep in whatever posture he happens to be in at the time; if put in a standing position with his hands above his head, he remains in that posture until disturbed; and if placed on two chairs, his head resting on one and his feet on the other, he remains so, the body being quite stiff.

THE LATE DR. THOMPSON.—At the meeting of the Council of the Irish Medical Schools and Graduates' Association, held on the 19th inst., the following resolution was passed, on the proposal of the Chairman of Council (Professor Gerald F. Yeo, M.D.), seconded by Dr. Macnaughton Jones (President)—viz.: "That the Council of the Irish Medical Schools' and Graduates' Association, having regard to the late Dr. Thompson's intimate connexion with the Association, first as its founder and honorary secretary, and afterwards as honorary treasurer, hereby desires to convey to Mrs. Thompson its deep sympathy with her in her bereavement, and to express its sense of the loss the Association has sustained by the death of one to whom it has been so much indebted." Brigade-Surgeon W. Alexander, M.D., has been appointed honorary treasurer to the Association.

UNIVERSITY OF OXFORD.—Notices have been issued that examinations for the degree of Bachelor of Medicine will commence in the Medical Department of the Museum as follows:—The Second (or Final) Examination, Thursday, June 17th, at 10 A.M. The First (or Scientific) Examination, Saturday, July 3rd, at 10 A.M., for Chemistry and Physics; and on Monday, July 5th, for Anatomy and Physiology. Candidates for either of these examinations should send in their names on or before June 3rd to "the Regius Professor of Medicine, Medical Department, Museum, Oxford." Candidates for the Scientific Examination are to state whether they have passed the Preliminary Honour Examination in the School of Natural Science; and, if not, whether they desire to present themselves for Physics and Chemistry only at this examination, or for all the subjects thereof. Both the examinations will be conducted this year under the conditions of the statute of 1860.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BOND, J. W., M.D., B.Sc.Lond., M.R.C.S., has been elected a Member of the Honorary Staff of the Hospital for Diseases of the Throat, Golden-square.

BROCKATT, A. A., L.R.C.P., M.R.C.S., has been appointed Resident House-Physician to St. Thomas's Hospital.

BROWNE, OSWALD A., M.A., M.B., M.R.C.S., &c., has been appointed Physician to the Royal Hospital for Diseases of the Chest, City-road, London.

COLLIER, M. P. MAYO, M.S.Lond., F.R.C.S., Senior Assistant Surgeon, has been appointed to have charge of the Throat and Ear Department at the North-West London Hospital, Kentish Town-road.

CROWDY, F. D., M.B.Oxon., M.R.C.S., L.S.A., has been appointed Resident House-Physician to St. Thomas's Hospital.

EVANS, C. S., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

GODFREY, A. E., L.R.C.P., M.R.C.S., has been appointed Non-resident House-Physician to St. Thomas's Hospital.

GOODBY, E. S., M.R.C.S., L.S.A., has been appointed House-Surgeon to St. Thomas's Hospital.

HUTTON, J. S., L.R.C.P., M.R.C.S., L.S.A., has been appointed Resident Accoucheur to St. Thomas's Hospital.

KIDD, H. CAMERON, L.R.C.P., M.R.C.S., has been reappointed House-Surgeon to St. Thomas's Hospital.

LITTLE, WM. MAXWELL, M.B., C.M.Edin., has been appointed Junior Assistant Medical Officer to the Norfolk County Asylum, Thorpe, near Norwich.

MACDONALD, G., M.D., M.R.C.S., has been elected a Member of the Honorary Staff of the Hospital for Diseases of the Throat, Golden-square.

MONTAGUE, A. J. H., M.R.C.S., L.S.A., has been appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

NAIRN, R., M.R.C.S., has been appointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

NICKOL, F. C., L.R.C.P., M.R.C.S., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

PARSONS, F. G., L.R.C.P., M.R.C.S., has been reappointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

PRINGLE, JOHN J., M.B., M.R.C.P., &c., has been appointed Physician to the Royal Hospital for Diseases of the Chest, City-road, London.

SHAW, JOHN, M.D.Lond., M.R.C.P., Senior Assistant Physician, has been appointed to have charge of the Gynæcological Department at the North-West London Hospital, Kentish Town-road.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., has been reappointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

TOBIN, MR., Assistant Surgeon, St. Vincent's Hospital, Dublin, has been appointed Surgeon to that institution.

TRAVERS, OTHO ROBERT, M.R.C.S., L.S.A., has been appointed Medical Officer for the Seventh District of the Battle Union.

WALFORD, EDWARD, M.D., S.Sc.C.Camb., has been reappointed Medical Officer of Health for the Urban Sanitary District of Ramsgate, for a term of three years.

WHITE, WILLIAM HENRY, M.A., M.D., M.R.C.P., &c., has been appointed Physician to the Royal Hospital for Diseases of the Chest, City-road, London.

WOLFENDEN, R. N., M.D., has been elected a Member of the Honorary Staff of the Hospital for Diseases of the Throat, Golden-square.

Births, Marriages, and Deaths.

BIRTHS.

BELEMORE.—On the 18th inst., at Lyndhurst, Eaton, Norwich, the wife of Brigade-Surgeon A. J. Belemore, of a son.

COOMBS.—On the 19th inst., at Redburn, Spring-grove, St. Cuthbert's, Bedford, the wife of Rowland H. Coombs, M.D., of a daughter.

CRAIG.—On the 11th inst., at Sawtry, Petertow, the wife of James Craig, M.D., of Eastwood, Notts, of a son.

MOODIE.—On the 21st inst., at Park-avenue House, Stirling, the wife of Robert Moodie, M.D., B.Sc.Ed., of a daughter.

MORTIMER.—On the 15th inst., at Haslar Hospital, Gosport, the wife of Deputy Inspector-General E. T. Mortimer, R.N., of a daughter.

PERIGAL.—On the 23rd inst., at New Barnet, Herts, the wife of Arthur Perigal, M.D., of a daughter.

WARNER.—On the 18th inst., at Rydal, Woodford-green, Essex, the wife of Percy Warner, M.R.C.S., L.R.C.P.Lond., of a son.

WELSFORD.—On the 21st inst., at 46, Oxford-gardens, W., the wife of George F. Welsford, M.B., of Woodstock, Oxon, of a son.

MARRIAGES.

CLEGHORN—BROWNING.—On the 1st ult., at the Church of the Nativity, Blenheim, New Zealand, George Cleghorn, M.R.C.S., to Annie, daughter of the late James Torry Browning, of Oxford.

MENDS—WILSON.—On the 20th inst., at St. James's, Kidbrook, Bowen Stilon Mends, Surgeon, Royal Navy, to Ada Latham, elder daughter of Colonel John J. Wilson, Royal Engineers.

OMAN—DARRACOTT.—On the 14th ult., at Holy Trinity Church, Sliema, Malta, N. Oman, M.D., to Rosie, youngest daughter of the late Thomas Bligh Darracott, Esq., of Kingsbridge, Devon, and Trinidad, W.I.

PIGGOTT — LAWRENCE. — On the 20th inst., at St. Mary Abbot's, Kensington, Fred. Cecil Holman Piggott, B.A.Cantab., M.R.C.S., &c., of Richmond and Teignmouth, to Ada Maria, daughter of the late Henry and Ellen Lawrence, of Kensington.

SCOTT—HEWETT.—On the 22nd inst., at Batu Gajah, Kinta, Perak, William Duncan Scott, M.A.Oxon., M.B., C.M., of the Perak Government Service, to Alice Mary, second daughter of the late Thomas Douglas Hewett, of H.M.'s Indian Navy.

DEATHS.

CROFTON.—On the 23rd inst., at Carlton Lodge, Teignmouth, Devon, William Crofton, M.D., of Montagu Villa, Cheltenham, and of Lakefield, co. Leitrim, J.P. for that county, in his 73rd year.

JONES.—On the 22nd inst., at Henblas, Bala, Merionethshire, Richard Owen Jones, M.R.C.S., L.S.A., aged 48.

MACNAB.—On the 23rd inst., at Greenhill, Crosshills, Yorkshire, R. A. Macnab, M.D., aged 57.

TROTTER.—On the 21st inst., at Sunny Bank, Holmfirth, Edward Trotter, Surgeon, in the 76th year of his age. Friends will please accept this the only intimation.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 27th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 21	30·15	S.W.	59	53	103	71	49	·10	Cloudy
,, 22	30·17	N.E.	59	54	89	66	54	·41	Overcast
,, 23	30·06	N.W.	55	53	96	64	49	·53	Overcast
,, 24	29·92	N.E.	56	55	...	57	50	·02	Overcast
,, 25	29·73	W.	57	53	103	63	48	1·46	Cloudy
,, 26	29·63	W.	57	51	103	62	51	·05	Cloudy
,, 27	29·37	S.W.	54	52	...	...	51	·25	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE IMPERIAL UNIVERSITY OF JAPAN.

THE Imperial University of Japan has been recently reorganised. One of its most important departments is the College of Medicine, which is presided over by Dr. Miyake. The main course of instruction is modelled after that in the German medical colleges; the foreign professors, of whom there are at present five, are also German. The course covers a period of four years, and the preparatory course three years more. There is also a course of lectures delivered in the vernacular, which is called the special course. The total number of students last year was nine hundred and seventy-two. The medical school of Japan is eleven hundred years old. In its early days it was presided over by a superintendent and assistant, under whom there was one professor of medicine, one of acupuncture, one of massage, one of diseases of women, a teacher of materia medica, botanists, and a number of physicians. The whole course covered seven years.

Mr. R. Hodges is referred to a general notice at the head of this column.

RINGWORM IN NEW-BORN INFANTS.

To the Editor of THE LANCET.

SIR,—The two medical practitioners who have recorded in your pages the discovery of ringworm in new-born infants would confer a boon upon medical science by giving some further proof of the correctness of their diagnosis. It would, for example, be interesting to know whether the diagnosis was verified by the discovery of spores or mycelium under the microscope. Taking into consideration all that is at present known as to the conditions of intra-uterine human life on the one hand, and all that is known as to the natural history of tinea on the other, is it not on the whole more probable that the diagnosis of ringworm was a mistake than that two children were born with patches of fungoid growth on their skin?

I am, Sir, yours truly,

May 20rd, 1886. M.B. OXON.

Mr. C. Clark Burman (Belford) asks if intense cutaneous irritation has been noticed to follow the administration of hydrobromic acid.

PRACTICE IN CANADA.

To the Editor of THE LANCET.

SIR,—Could any of your readers give any information regarding practice in Canada—nature of appointments, and how procurable; if a special licence must be obtained, and fees?—I am, Sir, yours truly,

May 25th, 1886. COLONIST.

NEURASTHENIA AND ABDOMINAL BELTS.

THE inhabitants of this globe may suffer from nervous weakness or neurasthenia simply because they neglect to wear abdominal supports! At least that is the conclusion that naturally follows from the recent teaching of M. Glénard of Lyons, who believes that some cases of nervous exhaustion are attributable to gastroptosis, or lowering of the stomach; to hepatoptosis, or descent of the liver; or to nephroptosis, which is another name for floating kidney. Imagine the following colloquy in a physician's consulting room:—Patient: "And now, doctor, after all this sounding and examination, pray tell what is the matter with me." Physician: "My dear sir, you have habitually bolted your meals, which have likewise been too abundant; as a consequence you have caused your stomach to descend from its natural situation—*facilis descensus Averni*,—and this gastroptosis, as we call it, has acted seriously on your nervous system, hence your languor, irritability, and general loss of tone, &c. My advice to you is to read 'Strapmore,' put on an abdominal belt, and cultivate a waist!"

Boreas is bound not to practise without the consent of the principal.

A ROUGH-AND-READY MEDICAMENT.

To the Editor of THE LANCET.

SIR,—Having a strong impression that I once read in the "Mémoires de M. le Baron Larrey," or in some other autobiographical publication of that period, that he (Larrey) or one of his subordinates had resuscitated a quasi-moribund French general or marshal by wrapping him up, *pueris in naturalibus*, in a sheep or horse's skin that had been just stripped off the living beast, during the disastrous retreat from Moscow in 1812, I am anxious to know if such is the case, and if there is any evidence to show that this practice has existed from all historic time—not only among savage races, but also among primitive or remotely situated peoples in our own midst. I believe that such will, on due inquiry, be found to have been the case, and I ask your permission to allow me to solicit authentic deliverances on or references to the point in your pages. Having had some recollection of seeing it mentioned in Homer, I glanced yesterday, with Pope in one hand and the original itself in the other, over this classic, looking especially for any allusion to it under the headings of "Podaleirius" and "Machaon," but utterly failed in this search, and the only descriptions of it I can just now recall stands as follows. Relating a hypothetical case of small-pox—or, rather, dwelling on the peculiarities of its treatment as these are developed on the spot—Mr. Thorburn says, in his "Bannu," p. 115, that the father of our supposed sufferer "nursed him for a day or two, during which the fever showed no signs of abating, and *then determined to apply the great Pathan remedy, which is practised all over Afghanistan.* He had a sheep slaughtered and skinned, and after rubbing a little oil or turmeric upon the skin, wrapped up his son in it while it was hot. He next laid him on the bed, put a large quilt over him, and kept the door shut to prevent any draught coming in. At the end of twenty-four hours the skin was removed, and a new one substituted. This time it had the desired effect, and before Sherdil had worn it ten hours, he said in a faint voice to his father, 'Papa, I have become water.'" I will only here add that the italics are mine, and that the Cabulees I questioned on this issue at Peshawur appeared to be familiar with it. Anyhow, none of them denied its occasional use or efficacy in that country.

In that fragment of autobiography with which Mr. Lockhart begins his interesting Life of Scott (I allude to the Abridgment of it only), it is said that "it is here, at Sandy Knowe, in the residence of my paternal grandfather ..... that I have the first consciousness of existence. ..... Among the odd remedies recurred to, to aid my lameness, some one had recommended that so often as a sheep was killed for the use of the family, I should be stripped and swathed up in the skin, warm, as it was flayed from the carcass of the animal. In this Tartar-like habiliment I well remember lying upon the floor of the little parlour in the farm-house, while my grandfather, a venerable old man with white hair, used every incitement to make me try to crawl. I also distinctly remember the late Sir George McDougal ..... joining in the attempt. Kneeling on the ground before me, and dragging his watch along the carpet, he, too, tried to induce me to follow it." The stratagems or incitements of these two venerable personages are only, I think, an expression of the faith with which, at all ages and in every clime, the "movement" treatment, *alias* massage or shampooing, has been employed for the cure or relief of stiff or painful joints.

I am, Sir, your obedient servant,

Auriol-road, W., May 16th, 1886. WM. CURRAN.

P.S.—Since the above was written I have looked for information on the point in the works of Gibbon, Pliny, Quintus Curtius, and Rollin, but can find nothing bearing on it in either of these writers, and the words of Curtius would seem to imply that the practice was unknown to the followers of Alexander. Anyhow, they did not resort to it even amid the snows and ice of the "frosty Caucasus"; and we are, I fear, no whit more advanced in our knowledge or treatment of the torpidity, &c., that are produced by extreme cold than they were. "A comilitibus torpentes excitabantur," says our author, "neque aliud remedium erat, quam ut ingredi cogerentur"; and if friction and the warm bath were here thrown in—which may be, for all we know to the contrary, included in this "excitabantur"—I know of no other, or better, "remedium" for these conditions in these our own days.—W. C.

ALCOHOL IN POOR-LAW PRACTICE AT CAMBERWELL.

DR. GREENE having called for a return of the cost of wine and spirits issued on medical certificates for out-door relief in ten years, the returns show a diminishing quantity—thus: 1876, £67; 1877, £44; 1878, £45; 1879, £22; 1880, £25; 1881, £35; 1882, £30; 1883, £25; 1884, £22; 1885, £16. It would seem that in pauper, as in private, practice the tendency is to a diminishing quantity of alcohol. The profession, however, will not entirely abandon the right to use alcohol when it sees fit, in spite of the startling statement of the chairman of the board that alcohol had only been used in three cases at the London Temperance Hospital since it was opened, and that all three cases proved fatal.

Messrs. Davis, Bergendahl, and Co.—We have no recollection of the article.

MECHANISM OF DEFECATION, MICTURITION, AND PARTURITION.

To the Editor of THE LANCET.

SIR,—In your issue of May 15th I am reported to have said, at the Obstetrical Society's last meeting, "that in defecation, micturition, and parturition there is a reflex tonic contraction kept up in the muscular fibres, especially in the sphincters." As this is not what I said, and conveys a wrong impression of what I meant, I should be glad if you would insert this correction. What I said was that the sphincter ani (externus) and sphincter vesicæ (Henle), and probably the cervix uteri (=sphincter uteri), were ordinarily in a state of reflex tonic contraction, and that during the acts of defecation, micturition, and parturition these three sphincters were respectively relaxed. Not that the muscles actively dilate, but that they passively relax, so that the different expulsive muscles have less resistance to overcome than they would have if the reflex tonic contraction were kept up in the sphincters.

I am, Sir, yours truly,

St. Thomas's-street, S.E., May 24th, 1886. P. HORROCKS.

UNQUALIFIED ASSISTANTS.

One who has Served his Time as a Pupil.—There is nothing in the Medical Bill of the Government to alter the law as regards unqualified practice or bearing on unqualified assistants. Our correspondent's position is one to which little objection has been raised, and is very different from that of an unqualified assistant placed by a qualified practitioner in charge of a so-called dispensary, or in sole charge of patients. A private Bill before Parliament, introduced by Mr. Morgan Howard and others, aims a direct blow at the latter class of cases, and with much justification. The drift of professional and public opinion is in the direction of having all assistants qualified.

Inquirer.—A copy of the Russian pamphlet will be forwarded to our correspondent.

Fairplay.—The matter is more of local than of general interest.

THE STRENGTH OF THE SOLUTIONS OF MORPHIA AND STRYCHNINE.

To the Editor of THE LANCET.

SIR,—I have just purchased the latest edition of "Squire's Companion," and am a little surprised to find that the solutions of morphia and strychnine have been increased in strength. Ought not the medical profession to have been warned that such was the case? for many might prescribe those forms in entire want of knowledge that these alterations had been made. I am, Sir, yours truly,

May 24th, 1886. IMPRUDENS.

A SCIENTIFIC ADDRESS A HIGHLY PRIVILEGED COMMUNICATION.

IN a case occurring in Pennsylvania before Judge Arnold, in which a Dr. Carl Seller was sued for speaking disparagingly of a proprietary medicine—not to the public, but in the course of an address delivered to the College of Pharmacy—the judge, after hearing the plaintiff's case, directed the jury to bring in a verdict for the defendant. In his charge, the law of the State was declared to be that a scientific lecture before students or a medical association is not only a privileged, but a highly privileged, communication, and that malice must be shown to exist in order to render the lecturer liable for an expression of opinion under such circumstances.

Junior.—Fees received by assistants for any purpose are the property of the principal. But such fees as are mentioned by our correspondent may fairly be shared with his assistant, if the principal sees fit.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In my observations on Mr. Eve's specimens exhibited at the Pathological Society (THE LANCET, May 22nd, p. 973) I referred not to "Hart's paper on General Anatomy" as reported, but to Harz's monograph published about two years since in the German *Archiv für Mikroskopische Anatomie*. I am, Sir, yours truly,

Granville-place, W., May 21st, 1886. ALBAN DORAN.

THE MEDICAL BILL AND PARIS DEGREES.

A Graduate of Paris.—There can be no doubt that the degree of Paris would be immediately and cheerfully recognised as entitled to registration by the Medical Council under the Bill of the Government should it become law. It is not specified, nor is any foreign or colonial degree; but it is eminently one of the degrees the registration of which is contemplated.

Justitia will find an allusion to the subject in an answer to another correspondent. Unqualified assistants have often themselves to blame for the criticism they incur by placing themselves in thoroughly false positions.

Mr. Buckingham.—We are not in possession of the information.

USE OF ICE FOR DYSPNŒA.

To the Editor of THE LANCET.

SIR,—In a case of advanced phthisis which came under my care recently, and in which acute attacks of dyspnœa, accompanied with, and apparently produced by, a febrile condition of the patient, proved the most troublesome and distressing symptom, I found that ice used locally on wrists and temples, with due regard to the state of the pulse, &c., afforded very great relief, the patient being soothed, the breathing relieved, and sleep obtained. Doubtless the lowering of temperature thus produced tended to check the excessive tissue waste, and in this way threw less work on the defective lungs.

Although I do not remember to have seen this treatment recommended in such text-books as I am familiar with, I venture to bring it to your notice, not as a startling novelty—since, if my explanation be the correct one, it is merely the bringing into play of well-recognised physiological principles,—but rather to elicit, it may be, some further illustrations of its beneficial employment, or some more experienced expression of opinion as to its applicability in cases where similar conditions exist.

I am, Sir, yours obedient servant,

May 25th, 1886. RANKINE DAWSON, M.A., M.D., &c.

A DAY IN THE COUNTRY.

THE REV. J. W. PITCHFORD, of St. Jude's Vicarage, Southwark, asks us to state that he will thankfully receive subscriptions towards a fund for enabling 400 school-children and others who have saved up their pence for the purpose, to enjoy a day's outing in the country.

Mr. Thos. Williams.—It is not incumbent upon a doctor to expose all the latent and possible diseases of his patients, though he is well within his duty in giving them such general hints as are likely to preserve their health.

DIET FOR GOUTY SUBJECTS.

To the Editor of THE LANCET.

SIR,—Will any of your numerous readers suggest the most wholesome diet for a medical brother who is a martyr to gout, with a ravenous appetite and a tendency to corpulency. He has tried "Banting," with an increase of the former evil, and a vegetarian diet with an increase of the latter. Any suggestion will be gladly received.

I am, Sir, yours faithfully,

May 17th, 1886. A SUBSCRIBER.

Medicus (Orange State) and *M.D.* (Mossley) have forgotten to enclose their cards.

ERRATA.—In our last issue, page 980, second column, third line, *for* "lymph" *read lymphatics*.—At page 995, first column, last line of Extraordinary Cæsarean Operation, *for* "woman" *read wound*.—In Mr. Leeming's letter on Amnesic Aphasia, published in our last, *for* "use common words" *read* uncommon words.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Marshall, London; Mr. V. Horsley, London; Dr. G. Mundie; Sir H. W. Acland, Oxford; Mr. J. Hutchinson, London; Mr. Nelson Jones, Swansea; Mr. Raymond, Louisville; Mr. Fawson Lee, Salisbury; Mr. Doran, London; Mr. Greswell, Louth; Dr. Horrocks, London; Mr. Stephen Paget, London; Mr. R. G. Patteson, Dublin; Messrs. Burroughs and Wellcome, London; Mr. T. D. Price, Nottingham; Dr. Sachs, New York; Surg.-Major Evatt, London; Dr. Donkin, London; Dr. Ludwig Loewe, London; Mr. H. Fuller, London; Mr. T. Williams; Mr. Van Gezel, Berhamper; Mr. R. J. Lee, London; Mr. Plowright, King's Lynn; Mr. Butterfield, Sevenoaks; Dr. O'Neill, Belfast; Dr. Semon, London; Mr. Weatherup, Belfast; Dr. Maguire, London; Dr. Squire, London; Mr. C. R. Jennings, London; Mr. McMunn; Dr. Dobie, Chester; Mr. Sinclair, London; Mr. Whysall, Grantham; Dr. N. Kerr, London; Dr. Morton, Kilburn; Mr. Ellis; Messrs. Maythorn and Son, Biggleswade; Mr. Rawlinson, Burnley; Mr. Hyatt, Shepton Mallet; Dr. Anderson, Waltham; Mr. Diggins, Lancaster; Mr. Wilson,

Plymouth; Dr. Wright, Toronto; Mrs. Grattan, Cork; Mr. Gamgee, Birmingham; Dr. Bloch, Paris; Mr. Cooper, Hull; Mr. Morse, Apple Durcombe; Mr. Abbs, Dewsbury; Dr. Branthwaite; Messrs. Ulbrich and Co., Bohemia; Mr. Abbott, Birmingham; Messrs. Livingstone and Co., Edinburgh; Messrs. Nicholas, Manchester; Messrs. Wrigley and Sons, Rochdale; Mr. Kelcey, Margate; Miss Milson, Box; Mr. W. W. Jones; Mr. Mason, Highbury; Dr. Steele, Rome; Messrs. Rideal and Co., London; Mr. Hume, Edinburgh; Messrs. Müller and Co., Glasgow; Mr. Watkinson, Crosshills; Mr. Remington, Notts; Dr. Gibson, Pennsylvania; Mr. Swanton, Tonbridge; Miss Badboro, Eton; Mr. A. Ireland, Cradock; Mr. W. H. Kesteven, London; Dr. Reynolds, Cape Colony; Mr. Bagshaw, Salford; Dr. Wade, Birmingham; Dr. Thomas, Sheffield; Mr. G. Brown, London; Mr. Vernon; Mr. MacDonogh, Bristol; Dr. Glynn, Liverpool; Dr. Aveling, London; Dr. Lindsay, Belfast; Dr. C. H. Saunders, London; Mr. Waldie; Dr. Shepherd, London; Dr. R. Black, Brighton; Mr. Pitchford, London; Mr. J. H. Morgan, London; Dr. J. Murphy, Sunderland; Messrs. Oliver and Boyd, Edinburgh; Mr. Hartzhorne, Chiswick; Messrs. Maclachlan and Co., Edinburgh; Dr. Nisbett, Helmsley; Messrs. Benjamin and Sons, London; Mr. Ostell, Carlisle; Mr. Hope, London; Mr. Hankin, Belfast; Messrs. Dawson Bros., Montreal; Messrs. Woolley and Co., Manchester; Mr. Pritchett, Eastrick; Mr. R. Lawford Knaggs, Huddersfield; Messrs. Hooper and Co., London; Messrs. Haller and Co., London; Mr. Moring, London; Mr. McDowell, Tunbridge Wells; M.B. Oxon.; An Assistant (Essex); Imprudens; Fairplay; Medical Staff; M.D., Edmonton; Maloja; M.; Y. Z.; B. G.; Ex-House-Surgeon; B.A.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Letters, Dundee; Dr. McDougall, Pontesbury; Mr. Cox, London; Mr. Fox, Birmingham; Dr. Armstrong, Manchester; Messrs. Mottershead and Co., Manchester; Mr. Arrowsmith, Bristol; Dr. Burgess, Invergordon; Dr. Needham, Gloucester; Mr. Ryan, London; Mr. Wood, Richmond; Mr. Harrison, Derby; Mr. Hogg, London; Mr. Hamel, Tamworth; Mr. St. Dalmas, Leicester; Messrs. Schluter and Son, Hamburg; Mr. Cartland, Windsor; Mr. Guest, Melsonby; Mr. Loy, Great Ayton; Mr. Merryweather, Gainsboro'; Messrs. Goddard and Massey; Dr. Smith, Leamington; Dr. Juler, London; Miss Hunter, Manchester; Dr. Whitla, Belfast; Mr. Cobbold; Messrs. Slinger and Co., York; Dr. Eberle, Thirsk; Mr. Wraith, Darwen; Messrs. Moore and Co., Hounsditch; Mr. Oxley, Norwood; Mr. Smith, Moreton-in-Marsh; Mr. Moore, Bayswater; Mr. Nutall, Bradford; Mr. Morden, Brighton; Mr. Keldin, Manchester; Dr. Craig, Eastwood; Rev. J. Jeffery, Holmfirth; Dr. Popham, Birmingham; Messrs. Wheatley and Co., Huddersfield; Mr. Waters, Southport; Messrs. Thompson and Co., Liverpool; Mr. Purvess, Kelso; Mr. Watkinson; Mr. Davis, London; Mr. Morrison, Snaith; Mr. Wheeler, Ilfracombe; X. Y. Z.; Surrey; Locum, Middleton; E. F., Stratford-on-Avon; K. H., Southsea; M.D., Manchester; M.D., Walsall; P., London; House; G. H., Poole; Mrs. D. Hallsham; A. M., Bournemouth; B. G.; Medicus, Birmingham; D., Newcastle-on-Tyne; J. C. S. S.; Alpha; A. H. C., Derby; H. W., Southport; Medicus, Padiham; Revd.; Member, London; X. B., Canterbury; G. K., Edinburgh; Z. A. C.; M. N. C.; M. A. C.; Ambulance.

Glasgow Herald, London Commercial Record, Club and Institute Journal, Sydney Daily Telegraph, Birkenhead News, Eastbourne Standard, Cradock (Cape of Good Hope) Register, Liverpool Evening Express, &c., have been received.

Medical Diary for the ensuing Week.

Monday, May 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Leonard C. Wooldridge: On the Pathology of the Blood.

Tuesday, June 1.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. Arthur Gamgee The Function of Circulation.

Wednesday, June 2.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Leonard C. Wooldridge: On the Pathology of the Blood.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. John Phillips and others. Dr. Champneys: On the Artificial Production of the so-called Lymphatic Varix.—Dr. Herman: Note on one of the Causes of Difficulty in Version, with remarks on the Practice of Amputating the Procident Arm.—Dr. John Phillips: Four cases of Spurious Hermaphroditism in one Family.

Thursday, June 3.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Professor Alexander Macalister: Habit as a Factor in Human Morphology.

Friday, June 4.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Leonard C. Wooldridge: On the Pathology of the Blood.
ROYAL INSTITUTION OF GREAT BRITAIN.—9 P.M. Dr. Walter H. Gaskell: The Sympathetic Nervous System.

Saturday, June 5.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION OF GREAT BRITAIN.—3 P.M. Prof. G. G. Stokes: Light, with special reference to Effects resulting from its Action on Various Substances.

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